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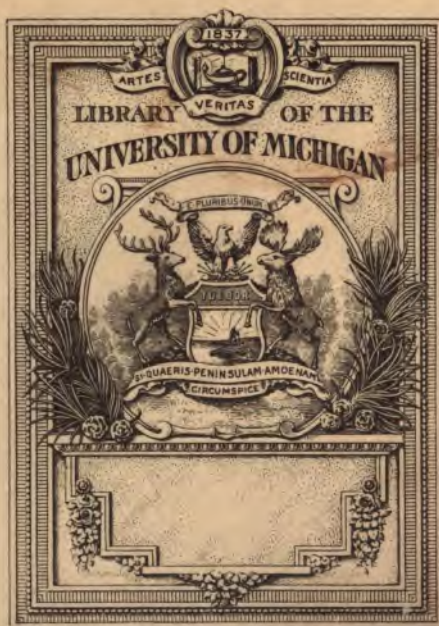
HAND WORK

FOR

KINDERGARTENS AND
PRIMARY SCHOOLS

LB
1169
H87

DOMESTIC ACTIVITIES
WOOD WORK
RAPHIA
DRAWING
BLUE PRINT



LB
1169
.H87



Children Ironing

L. L. S.

H A N D W O R K

FOR

KINDERGARTENS *and* PRIMARY SCHOOLS

DOMESTIC ACTIVITIES
WOOD WORK
RAPHIA
DRAWING
BLUE PRINT

By JANE L. HOXIE
(*Ethical Culture School, New York City*)

Illustrated by LEILA MAUDE WILHELM



1904
MILTON BRADLEY COMPANY
SPRINGFIELD, MASS.



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Introduction

WE believe the exercises suggested in this little volume supply in some degree the opportunities for large free muscular movements, for original invention, and for self-reliant activity, that are every day coming to be more and more the demands of the modern kindergarten and primary school.

In the early history of our country, before the growth of our large cities, many activities were possible to the child that are now almost wholly denied him. This is especially true of the child born and brought up in the city. Under former and more primitive conditions, the child's environment contributed directly to sturdiness of character and robustness of physique. He ranged the fields and woods almost at will, picked berries on the hillside, drove the cattle to pasture, watched the planting in the springtime, took his small share in the care of the growing crops and in their harvesting in the autumn. He thus came into

Introduction

direct and vital contact with nature and with agriculture, the foundation of many industries.

To a similar degree, the child under more primitive conditions came into intimate relationship with the many and varied activities of the household. His invention was stimulated by exercises the practical value of which he appreciated, and he grew strong in both body and mind.

How shall we requite the child of to-day for the loss of a life near to nature and to primitive industrial conditions, a life which tended to the many-sided development characteristic of our earlier history? Our schools must to a large extent answer this question, and the beginning of the answer must be wrought out in the kindergarten.

While we would in no wise depart from the spirit of Froebel's teachings, present conditions, taken in connection with the discoveries of physiological psychology, would seem to incline us, in some degree at least, to depart from the letter of Froebel's law, particularly in regard to the large amount of close and intricate work often given to little children.

The children of the kindergarten of Froebel's time, like the children under our own early primitive conditions, had almost unlimited access

Introduction

to the outside world, and they reaped the sturdiness of mind and body which is the result of such relationship. They received directly from nature and from their more primitive surroundings stimuli which the modern kindergarten must, to some degree at least, now supply. We believe, if Froebel were living to-day, that he would be the first to see the necessity for broader, freer work in the kindergarten to make good the losses of the child due to our more artificial and restricted environment, and also to conform to the scientific discoveries of the present time.

To meet the ever-increasing demand for such broad, free, creative work, the following exercises are submitted for the consideration of teachers.

J. L. H.

Hand Work for Kindergartens



Children Washing

Part I.—Domestic Activities

NO better kindergarten exercises are to be found than those supplied by some of the more simple domestic activities. The very little child is content to make believe. He does not feel the need of doing real things. The domestic activities, as exercises for the kindergarten, should be confined, therefore, to the older and more advanced children, say of five or six years, whom the purely imaginative plays have ceased (to a considerable degree) to satisfy.

To obtain the best results in the use of these activities, only a small group of workers should be occupied with them at one time. This necessitates the sectioning of classes in many kindergartens.

If possible, a small room should be fitted up wherein certain simple domestic activities may be carried on, but lacking this a corner of the kindergarten room may be used.

The necessary equipment consists of a small gas range, a teakettle, a double boiler, a set of small dishes, with the addition of knives, forks,

Hand Work for Kindergartens



Children Baking

And Primary Schools

and spoons, a small washtub, a wash bench, a washboard, a wringer, an ironing board and irons, a small churn, a butter bowl, a corn popper, an ice cream freezer, a molding board, a rolling-pin, a flour sieve, a mixing bowl, tablecloth and napkins, kitchen aprons, dish towels, dust cloths, a mop, a broom, a dustpan, a market basket, and a few miscellaneous dishes for various uses.

Many of these things, sufficiently large and durable for our purpose, can be found in children's toys, which may be purchased at little expense. With the exception of a gas range, almost the entire equipment of the kindergarten kitchen may thus be made up. Chairs and tables may be taken from those already in the kindergarten.

If the kindergarten has a workbench, the children themselves will delight to make little utensils for this improvised kitchen; and, though crude, their products will answer the purpose admirably. If the kindergarten also be so fortunate as to be a part of a larger school, the older boys and girls of the grades will be eager to contribute, — the boys constructing wash bench and ironing board, the girls making aprons and dusters and hemming towels and table linen.

If it does not seem desirable to make these domestic activities a regular part of the kindergarten curriculum, they may be reserved for

Hand Work for Kindergartens

special occasions, or for particular needs that arise in the course of the regular work.

Our little kitchen once equipped, the conditions are favorable for the most delightful happenings. Here the children may cook and serve little dishes for a birthday celebration. Here they may make pumpkin pie and cranberry sauce for their Thanksgiving festival. Here corn may be popped to festoon upon the Christmas tree and candy made to fill the Christmas boxes. Here jelly may be made for a sick playmate or food prepared for the kindergarten pets. Here the most delicious ice cream may be made and the most fascinating of Easter eggs prepared. Here also the children may wash and iron their paste and paint cloths, their dusters, towels, and aprons, and color their own cord and raphia, to be used later in the hand work. Through these various activities all the joys of marketing may take place and in this most delightful of all spots the children may even make bread and churn cream into butter. In this little kitchen the children will pass the happiest hours of their last and happiest kindergarten year. And why? Because here it is not all make believe; because here they are really doing something that has a vital relation to their own lives and the lives of those around them.

And Primary Schools



Children at Workbench

Hand Work for Kindergartens

Part II.--Wood Work

IN this day of increasing demand for untrammelled, vigorous expression of both mind and body, the workbench in the kindergarten is surely a legitimate innovation. Its value lies not in the tangible result, the finished product, but in the opportunity it gives for broad, free movement and the exercise of creative power.

The child's delight in the wood work arises from the vigorous exercise afforded the large muscles, from the lawful excuse it gives him for making a noise, and also from the fact that, through his own mental and physical efforts, he is furnished with objects which are not easily destroyed and which can be really used for the purposes for which they appear to be created.

Wood work at its beginning should be carefully superintended until the child can be trusted to injure neither himself nor the tools he uses, and until he gains some idea of the possibilities afforded by this new means of expression. The

And Primary Schools

period of supervision over, the child may be allowed to work freely and without suggestions, exercising at once his creative as well as his muscular force.

The best results are obtained by the use of prepared pine lumber, but these need not necessarily be the best results from the point of view of the child's development. Indeed, he will sometimes show more creative power in his manipulation of a few old spools and some irregularly-shaped pieces of wood obtained from a demolished soap box, than he will in the use of the more elaborately prepared material.

A very simple and inexpensive workbench made of undressed spruce, $2\frac{1}{2}$ ft. square and 2 ft. high, will accommodate four workers at a time. A good and sufficient equipment of tools for this bench consists of four Ball's saws, known as back saws, each 8 in. in length, four hammers of medium but not too light weight, four $\frac{5}{8}$ in. auger bits with gimlet handles, a box of nails of various sizes, a pot of glue, a lead pencil, and some small strips of wood of sufficient length to be used as measures. A $\frac{7}{8}$ in. stub chisel may be added for sharpening sticks for various purposes, but this should never be used in the unsupervised work.

A stain made of Diamond dyes may be used by the child for coloring the wooden toys and furni-

Hand Work for Kindergartens

ture which he makes. It is easily prepared by dissolving the powder in hot water, and a little skill in combining the different colored powders will give almost any tone desired. This stain may be applied with a brush or cloth. It dries quickly and with it an even covering is more easily secured than by using paint.

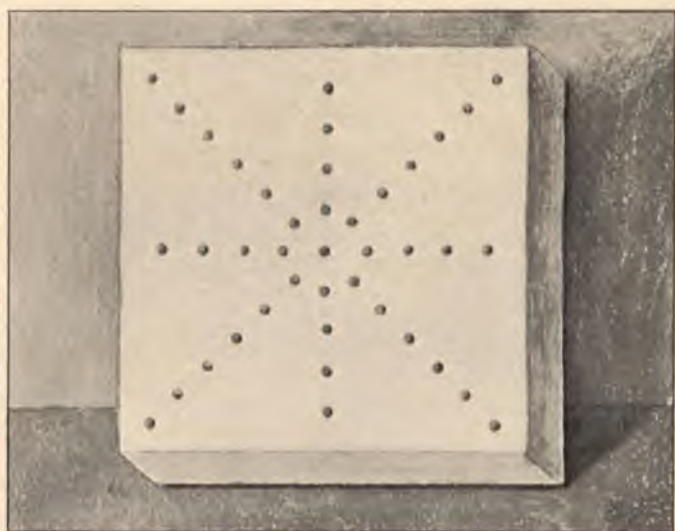
Lumber should be furnished already planed for the models described in the following pages. The child's independent work will consist in sawing, boring, nailing, and gluing. In planing and measuring he will require some assistance.

Perforated Board

From $\frac{3}{4}$ in. pine lumber saw a 5 in. square. With a hammer drive a large wire nail into the square to about the depth of $\frac{1}{4}$ in. at some point upon its surface. Pull the nail out and drive it again a short distance from the first hole. Continue making these holes until they form a symmetrical design upon the surface of the square board. The pattern may first be drawn upon paper if desired and the design thus formed, when fastened to the surface of the wooden square, will serve as a guide for the child's work.

After the board has been decorated in this manner it may be converted into a flower stand, a chair seat, a window box, or a table top.

And Primary Schools

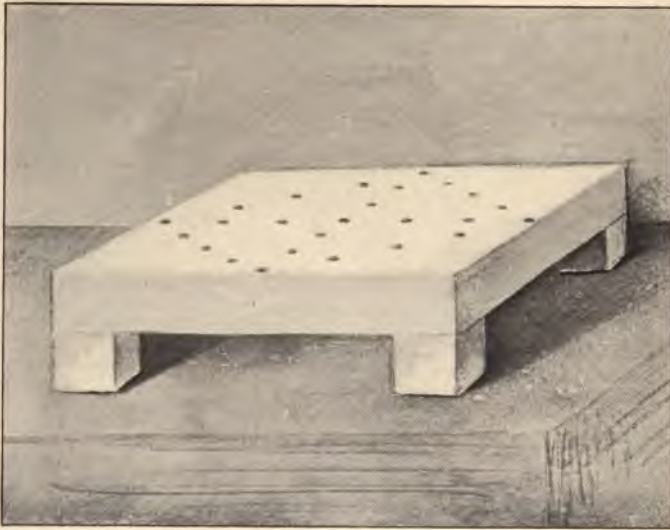


Perforated Board

Hand Work for Kindergartens

Model I.—Plant Stand

To utilize one of the perforated boards, prepare four pine blocks, $1\frac{1}{2}$ in. long, $1\frac{1}{2}$ in. wide, and $\frac{3}{4}$ in. thick. Nail these blocks to the under side of the perforated square, one at each corner, and the result is a pretty little stand for holding a plant.



Plant Stand

And Primary Schools

Model II. — Top

From a $\frac{1}{4}$ in. piece of pine lumber, saw a square, 3 in. x 3 in.

Bore a hole with a $\frac{5}{16}$ in. auger bit in the center of the square.

Saw from each corner of the square a right-angled isosceles triangle, whose hypotenuse is $1\frac{1}{4}$ in.

Insert into the center hole a 4 in. section of a dowel stick sharpened at one end and thick enough to fit snugly.



Top

Hand Work for Kindergartens

Model III. — Candlestick

For the base, saw from a 2 in. soft wood cylinder a $\frac{3}{4}$ in. section.

For the handle, bore a hole with a $\frac{5}{16}$ in. auger bit in one end of a $\frac{3}{4}$ in. dowel stick to about the depth of $\frac{3}{4}$ of an inch. Saw a $\frac{1}{4}$ in. section from the bored end of this stick.

For the holder, saw a 1 in. section from the bored end of the above-mentioned dowel stick.

Glue the closed end of the holder to the center of one of the flat faces of the base section. Glue the $\frac{1}{4}$ in. ring, to serve as a handle, to a point in the outer edge of the base section.

Insert a small Christmas candle in the holder and the model is complete.

If desired, a hand vise may be used to hold the dowel stick firmly in position while the hole is being bored.

And Primary Schools



Candlestick

Hand Work for Kindergartens

Model IV. — Boat

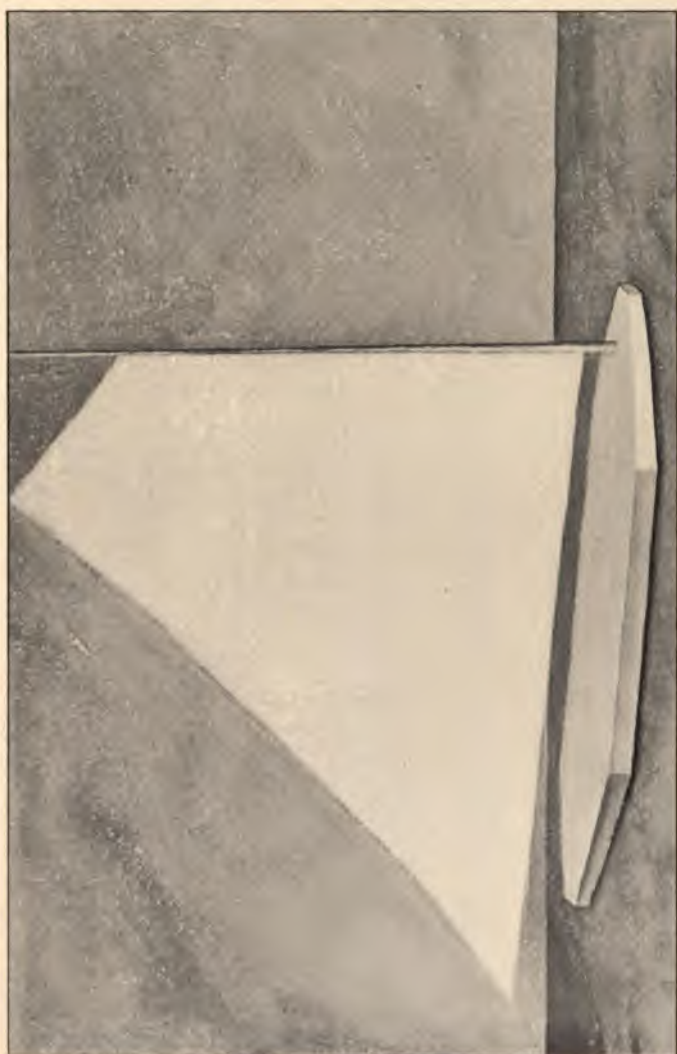
From a $\frac{3}{8}$ in. piece of pine lumber, saw an oblong, 10 in. x 4 in.

Measure in from the corners $1\frac{1}{4}$ in. on the ends and $2\frac{1}{2}$ in. on the sides. Connect these points by straight lines. Saw from each corner the right-angled scalene triangle thus marked off.

Bore a hole 1 in. from the front end of the sawed piece and insert in it a mast 8 in. high, made from a $\frac{5}{16}$ in. dowel stick. Glue a paper sail of the desired size to the mast.

Bore a hole in the front end and pass a string through it. The boat is then complete.

And Primary Schools



Boat

Hand Work for Kindergartens

Models V. and VI. — Molding Board and Rolling-Pin

For the board, saw a 12 in. length from a piece of pine lumber, 10 in. wide and $\frac{3}{4}$ in. thick.

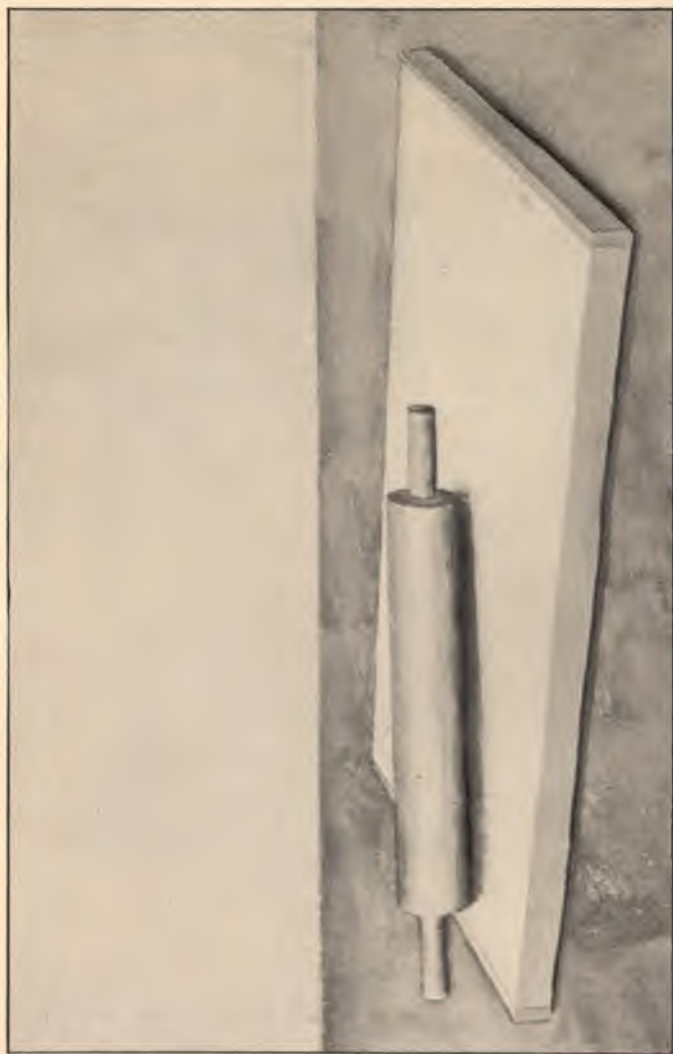
To keep the board from warping, nail to the two opposite ends, at right angles with the grain of the wood, a pine strip 10 in. long, $\frac{3}{4}$ in. wide, and $\frac{1}{2}$ in. thick.

For the pin, saw a section 6 in. long from a $1\frac{1}{2}$ in. soft wood cylinder. With an auger bit, bore a hole in each end of the section of cylinder to about the depth of 1 inch.

From a $\frac{3}{4}$ in. dowel stick, saw two sections each 3 in. long, for handles.

Insert the handles in the holes bored in the 6 in. section of cylinder and fasten them securely with glue.

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Molding Board and Rolling-Pin

Hand Work for Kindergartens

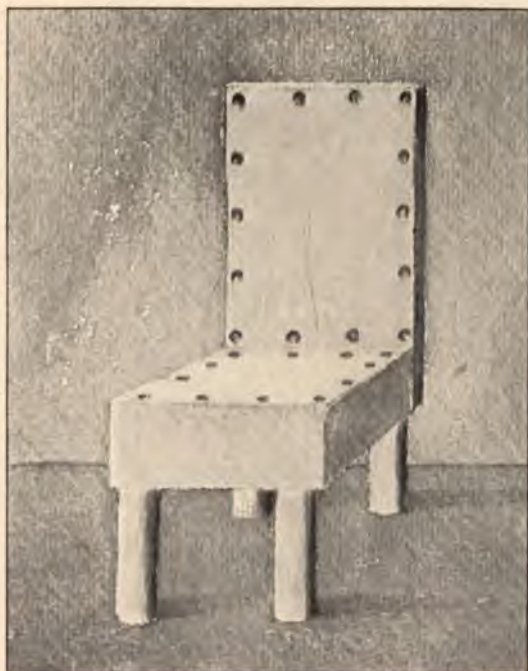
Model VII. — Doll's Chair

For the bottom or seat of the chair, prepare a square, 2 in. x 2 in., from $\frac{3}{4}$ in. pine lumber. Decorate this square seat with a design formed by making holes with a hammer and nail. Bore a hole in each corner of the bottom of the seat, with a $\frac{5}{16}$ in. auger bit.

Saw four $1\frac{1}{2}$ in. lengths from a $\frac{5}{16}$ in. dowel stick for legs. Insert these in the holes in the bottom of the seat and secure them with glue.

For the back of the chair, use an oblong block, 3 in. x 2 in., and $\frac{1}{4}$ in. in thickness. Fasten this by nailing it securely along the back edge of the chair seat.

And Primary Schools



Doll's Chair

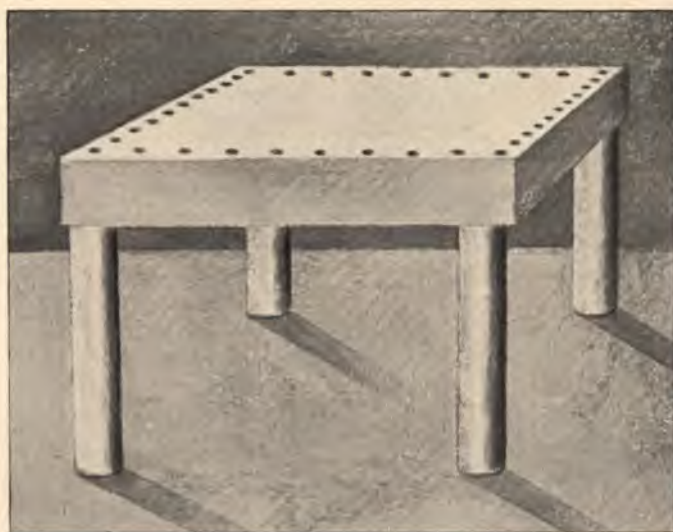
Hand Work for Kindergartens

Model VIII. — Doll's Table

From a $\frac{3}{4}$ in. pine board, saw a square, 4 in. x 4 in. Decorate this square with a design made with a hammer and nail. Bore a hole in each corner of the under side of this square with a $\frac{5}{8}$ in. auger bit.

For the legs, cut four 3 in. lengths from a $\frac{5}{8}$ in. dowel stick, and glue them into the holes on the under side of the table top.

And Primary Schools



Doll's Table

Hand Work for Kindergartens

Model IX. — Doll's Bedstead

Saw an oblong, 6 in. x 4 in. from a $\frac{3}{4}$ in. pine board. Bore four holes, one in each corner of this board, with a $\frac{3}{4}$ in. auger bit.

Saw four sections, each $1\frac{1}{2}$ in. long, from a $\frac{3}{4}$ in. dowel stick. Insert one of these pieces in each of the holes made in the oblong board, and fasten it with glue.

Prepare a square, 4 in. x 4 in., $\frac{3}{4}$ in. thick, for the headboard, and an oblong, 4 in. x 2 in., $\frac{3}{4}$ in. thick, for the footboard. Decorate both with nail hole designs and fasten them to the ends of the large oblong.

Articles of doll's furniture may be multiplied indefinitely and a whole doll house may thus be furnished by the children.

And Primary Schools



Doll's Bedstead

Hand Work for Kindergartens

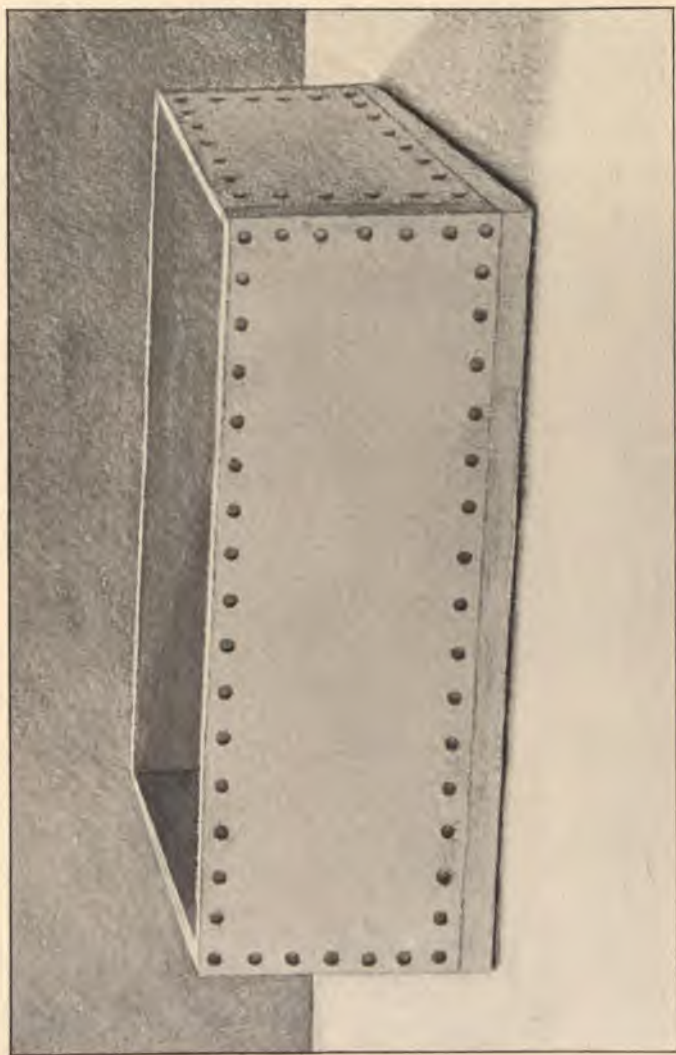
Model X. — Window Box

Use $\frac{3}{8}$ in. pine lumber. For the sides, saw two oblongs, 8 in. x 3 in. For the ends, saw two oblongs, 3 in. x $3\frac{1}{4}$ in. For the bottom, saw one oblong, 4 in. x 8 in.

Decorate the side and end boards with nail hole designs. To facilitate drainage, bore eight holes in the bottom board with a $\frac{5}{16}$ in. auger bit.

Fasten all together and fill with earth in which to sow seeds.

And Primary Schools



Window Box

Hand Work for Kindergartens

Model XI. — Sand Wagon

Use $\frac{1}{4}$ in. lumber. Prepare two oblongs for the sides of the wagon box, 8 in. x 2 in., two oblongs for the ends, 4 in. x 2 in., and one oblong for the bottom, 8 in. x $4\frac{1}{2}$ in. Fasten all together.

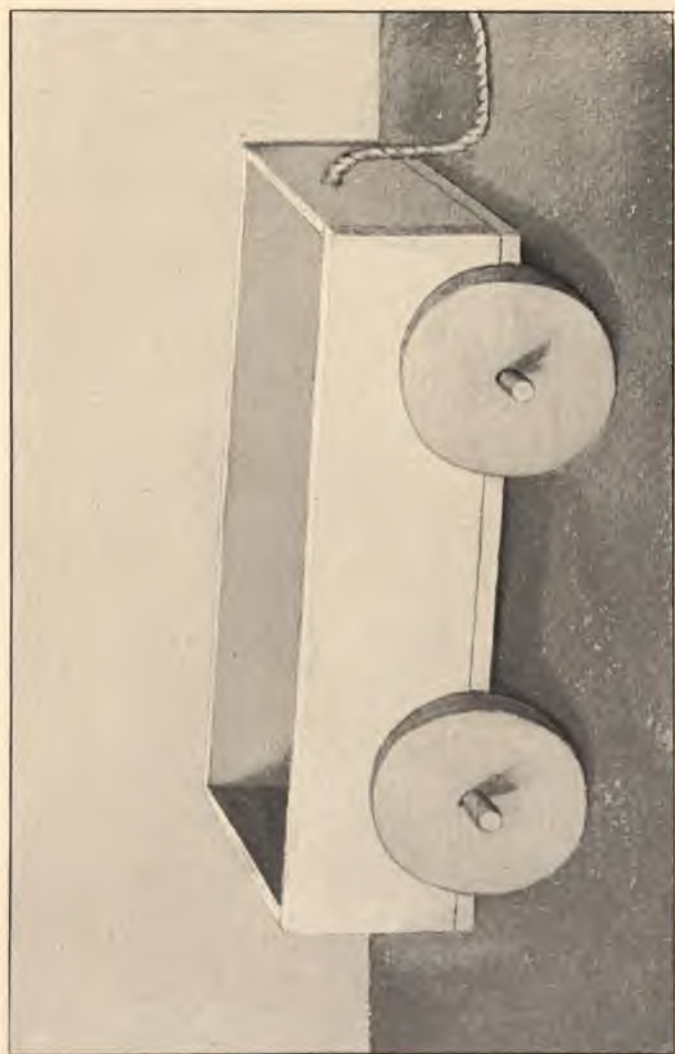
For wheels, saw four $\frac{3}{8}$ in. sections from a 2 in. pine cylinder and bore a $\frac{3}{8}$ in. hole in the center of each section.

For the axles, saw two $5\frac{1}{4}$ in. lengths from a $\frac{5}{16}$ in. dowel stick. Fasten these sticks to the bottom of the box by means of small wire brads.

Slip the ends of the axles through the holes in the wheels and secure them by means of small wire nails driven into the axles outside the wheels.

Bore a hole in the top of the front end of the wagon box and insert a string by which the wagon may be drawn.

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Sand Wagon

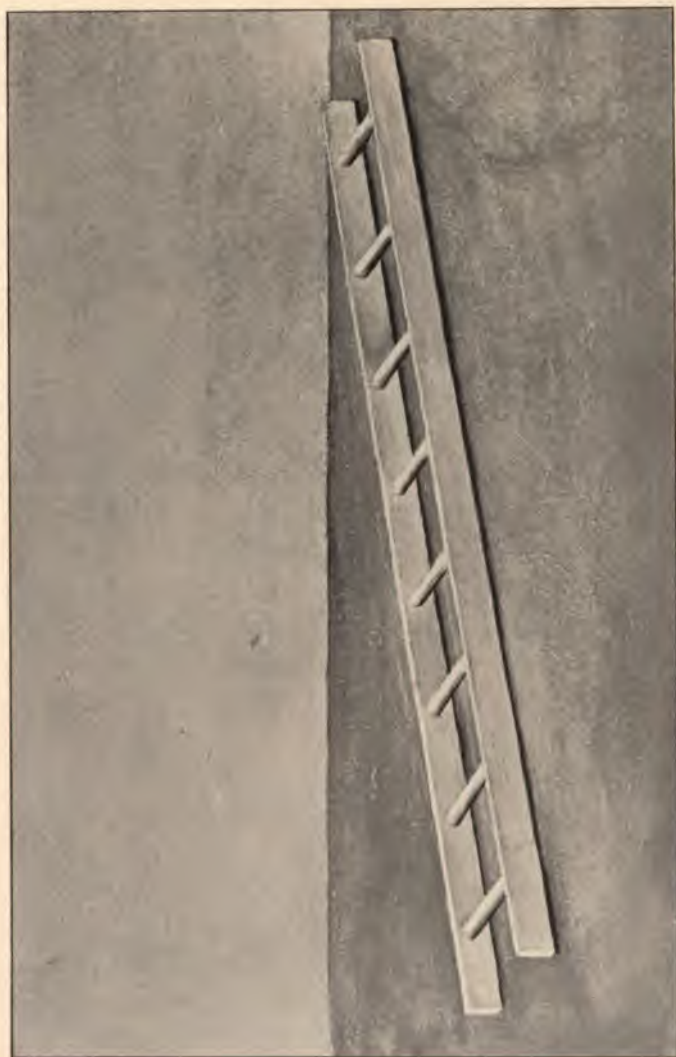
Hand Work for Kindergartens

Model XII. — Ladder

This model is suitable for group work, and when finished may be used in playing about the doll's house, to ascend to the roof in the case of a make-believe fire, or as a means of access to the roof garden. The children will also enjoy using it to reach articles in the room otherwise inaccessible.

This ladder is 48 in. long and 12 in. wide. There are eight rungs, each 12 in. long, made from $\frac{3}{4}$ in. dowel sticks. The side pieces consist of pine strips 48 in. long, 2 in. wide, and $\frac{7}{8}$ in. thick. The holes for the rungs are bored through the sides. The first and last rungs are placed $3\frac{1}{2}$ in. from the ends of the ladder and a distance of 5 in. is maintained between all the rungs. Small wire nails are used for fastening the rungs into place.

And Primary Schools



Ladder

Part III. — Raphia Winding

THE artistic possibilities of raphia, as well as its strength and pliability, make it especially desirable for kindergarten occupations. The conventional weaving and braiding of raphia have been found far too difficult for our purpose and some simple method must be devised for its use with little children. With this thought in mind, after much experience and observation, we present the series of raphia models which follows.

We believe the work here shown to be adapted to the needs of children of five and six years of age. It is particularly valuable because of its simplicity, its blending of the artistic and useful, its possibilities for independent effort on the part of the child, and because it develops manual skill without undue strain of eye or hand.

Materials Needed

Raphia, dyed or in the natural color, ash splint, and reed. These may be purchased of firms carrying kindergarten supplies or materials for Indian basketry.

And Primary Schools

Plain hard wood slats. Flat reed may be used instead, if preferred.

Pasteboard of medium thickness. Old boxes and writing-pad backs may be utilized.

Pasteboard mailing tubes of different sizes. These may be obtained of a printer or stationer. Ribbon bolts may be substituted for these if desired.

Tools Needed

These are sharp-pointed scissors, sloyd knife, foot ruler, and compasses. All are for the use of the kindergartner, in preparing the pasteboard foundations. A worsted needle, No. 18, is needed for the child.

General Suggestions

To secure the best results, the raphia should be wet and then allowed to become partially dry before using. This treatment renders it pliable.

The kindergartner may color her own material with Diamond dye; or the raphia may be used in the natural tone, and the children themselves, by means of brush and paint, may color the completed models.

When working, care should be exercised in holding the strands firmly and in winding them closely, or portions of the foundations may be exposed by the shrinking of the raphia.

During the process of covering, do not tie

Hand Work for Kindergartens

knots in the raphia. Fasten all the ends, except the last one, by holding them down and winding over them. When the foundation is completely covered, pass the last end of raphia through the eye of a large needle and secure it as any ordinary thread is fastened.

To insure an even covering of a disk it will be necessary to go over it more than once. Allow the strands of raphia to spread apart at the circumference of the disk at the first winding, as indicated in Fig. 1, and cover the portions of exposed foundation afterwards. Unless this rule is followed the results will not be satisfactory.

Use a compass and sharp-pointed scissors in preparing the foundation disks.

To make the foundation rings, wrap a piece of paper of the desired width about a mailing tube or ribbon bolt and secure it with a rubber band. The upper edge of the paper then acts as a guide for the sloyd knife, and sections may be cut from the pasteboard with exactness, ease, and rapidity. A strip of tin may be substituted for the paper guide with good results.

To make a raphia bow, loop a strand of the material back and forth in the fingers. Then wind the end of the strand firmly around the middle of the loops and tie in a hard knot at the back, as shown in Fig. 2.

And Primary Schools



Fig. 1



Fig. 2

Hand Work for Kindergartens

SERIES I

Model I. — Napkin Ring

FOUNDATION:—One pasteboard ring, 1 in. wide, 2 in. in diameter.

Take a strand of dampened raphia, hold one end down against the inside of the foundation ring and wind over it until the end is secure. Continue winding, adding another strand each time the old one is exhausted, until the whole ring is completely and evenly covered. Fasten the last end of raphia on the inside of the ring, using the large worsted needle for that purpose.



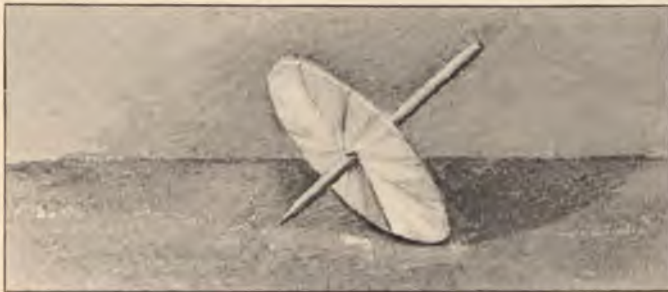
Napkin Ring

And Primary Schools

Model II. — Top

FOUNDATION:—One pasteboard disk, $2\frac{1}{2}$ in. in diameter, with a small round hole cut in the center.

Thread the worsted needle with raphia and pass the strand over and over the disk, putting the needle through the center hole each time. Allow the strands of raphia to spread apart at the circumference of the disk at the first winding, covering these portions of exposed foundation afterwards. Continue the winding until both surfaces of the disk are completely covered. Take a piece of reed, or a section of a dowel stick, 3 in. long and $\frac{3}{16}$ in. wide, sharpen at one end and pass it through the hole in the center of the disk.



Top

Hand Work for Kindergartens

Model III. — Penwiper

FOUNDATION:— One pasteboard disk, $2\frac{1}{2}$ in. in diameter, with a $\frac{1}{2}$ in. round hole cut in the center.

Cover the disk with raphia. Fasten several circular pieces of chamois skin to the under side of the disk. Sew a raphia bow in the center of the disk on top and the penwiper is complete.



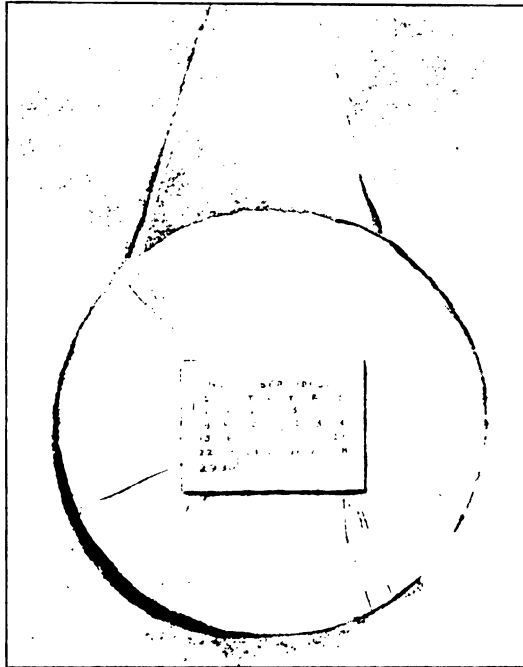
Penwiper

And Primary Schools

Model IV. — Calendar Back

FOUNDATION:—One pasteboard disk, 4 in. in diameter, with a $\frac{1}{2}$ in. round hole cut in the center.

Fasten a small calendar to the center of the raphia-covered disk. Ornament with bows and hang by means of a raphia loop.



Calendar Back

Hand Work for Kindergartens

Model V. — Pincushion

FOUNDATION :—One pasteboard ring, 1 in. wide and 2 in. in diameter.

One pasteboard disk, 2 in. in diameter, with a small round hole cut in the center.

Wind the ring and disk separately, then fasten them together, sewing the disk all the way around one edge of the ring, passing the raphia-threaded needle through the edge of the disk and up over the top edge of the ring at every stitch, as shown in Fig. 3.

Make a cushion for holding the pins by covering a scrap of cotton-wool with a bit of silk. Fasten this cushion into the box formed by the union of the disk and the ring.

A worsted ball, made over pasteboard rings, wound, cut, and trimmed entirely by the child, may be substituted for the silk cushion, if desired.

And Primary Schools



Fig. 3



Pincushion

Hand Work for Kindergartens

Model VI.—Stamp Box

FOUNDATION :—One pasteboard ring, 1 in. wide and 2 in. in diameter.

Two pasteboard disks, 2 in. in diameter, with a small round hole cut in the center of each.

Cover the disks and the ring with raphia. Use the ring for the side wall of the box, one of the disks for the bottom, and the other for the lid. Fasten the bottom as shown in Fig. 3. With a strand of raphia join the lid to the box by sewing over and over through the edge of the disk and ring at one point. Ornament the hinge thus formed with a bow of raphia.

And Primary Schools



Stamp Box

Hand Work for Kindergartens

Model VII.—Burnt Match Holder

FOUNDATION:—One wooden ring, $\frac{3}{8}$ in. wide and $2\frac{1}{4}$ in. in diameter.

To make the ring, soak a plain, hard wood slat in water until it becomes pliable. Cut a small portion from the end, leaving the slat $7\frac{1}{2}$ in. long. Bend this slat into the form of a ring. Lap one end over the other for the space of $\frac{1}{2}$ in., and sew firmly together with a needle and thread. If desired, a flat reed may be used instead of the slat.

Wind the ring thus formed with raphia and sew two little raphia bows on opposite sides of it. Make a loop for hanging and insert a small glass in the ring.

And Primary Schools



Burnt Match Holder

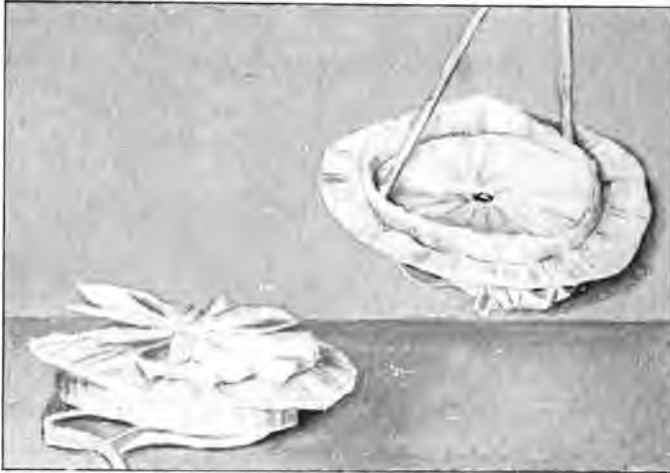
Hand Work for Kindergartens

Model VIII. — Doll's Hat

FOUNDATION:—One wooden ring, $\frac{3}{8}$ in. wide and $2\frac{1}{4}$ in. in diameter.

One pasteboard disk, $3\frac{1}{4}$ in. in diameter, with a small round hole cut in the center.

After covering the disk and the ring, sew the ring to the under side of the disk. Fasten short strands of raphia on opposite sides of the ring for tie strings and complete the hat by sewing a raphia bow to the center of the crown.



Doll's Hat

And Primary Schools

Model IX. — Pin Tray

FOUNDATION:—One reed ring, $\frac{3}{8}$ in. wide, $3\frac{1}{2}$ in. in diameter.

One pasteboard disk, $3\frac{1}{2}$ in. in diameter, with a $\frac{3}{8}$ in. round hole cut in the center.

Cut a piece of flat reed $11\frac{1}{2}$ in. long and form it into a ring. Lap the ends $\frac{1}{2}$ in. and sew them firmly together. After covering this ring and the pasteboard disk with raphia, join them as indicated in the model.



Pin Tray

Hand Work for Kindergartens

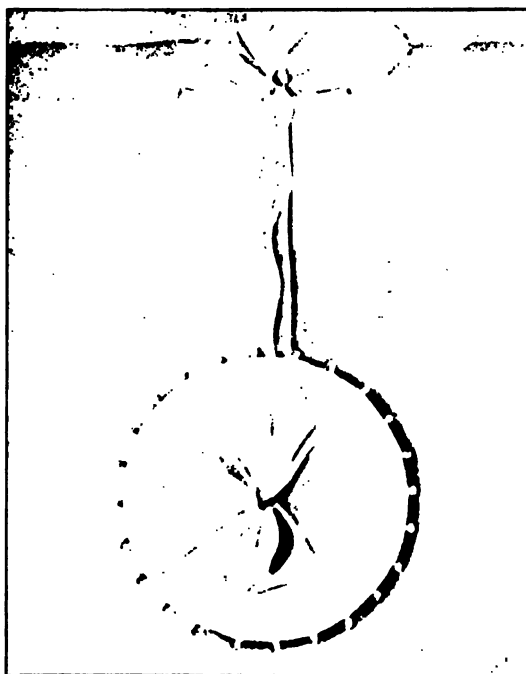
SERIES II

Model I. — Pin Ball

FOUNDATION:—Two pasteboard disks, 3 in. in diameter, with a $\frac{1}{2}$ in. round hole cut in the center of each.

Place the disks so that two of their circular faces coincide. Hold them loosely and wind both together with raphia. When completely covered, they have the appearance of one disk about $\frac{1}{8}$ in. thick. Sew a raphia bow to the center of each side of the disk thus formed. Stick pins around the edge and hang with a loop and bow.

And Primary Schools



Pin Ball

Hand Work for Kindergartens

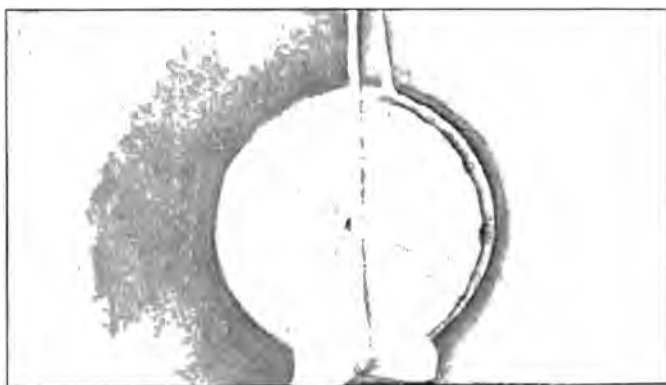
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Model II. — Needle Book

FOUNDATION:—Two pasteboard disks, $2\frac{1}{2}$ in. in diameter, with a small round hole cut in the center of each.

For holding the needles, place two or three circular leaves of flannel between the two raphia-covered disks. Fasten all together by means of a raphia hinge ornamented with a bow. For tie strings, sew a short strand of raphia to the edge of each cover at a point opposite the hinge.

And Primary Schools



Needle Book

Hand Work for Kindergartens

Model III.—Whisk Broom Holder

FOUNDATION:—Two pasteboard disks, $4\frac{1}{2}$ in. in diameter, with $\frac{1}{2}$ in. round hole cut in the center of each.

Wind the disks smoothly with raphia, and with a strand of the same material fasten them together at two opposite points on their circumferences. Make a loop for hanging, and, to complete the model, fasten a large raphia bow to the center of the front disk.

And Primary Schools



Whisk Broom Holder

Hand Work for Kindergartens

Model IV. — Whisk Broom Holder

Another whisk broom holder, less simple than the preceding one, may be made by joining three small raphia-covered disks in the form of a triangle, backing them with pasteboard and hanging with a loop and bow as shown in Model IV.

And Primary Schools



Whisk Broom Holder

Hand Work for Kindergartens

Model V. — Twine Box

FOUNDATION:—Six pasteboard disks, 2 in. in diameter, with a small round hole cut in the center of each.

Cover the disks separately and fasten them together in the form of a cubical shaped box, using four of the disks for the side walls, one for the bottom and one for the lid. The last named is to be fastened by means of a raphia hinge.

Place a ball of twine in the box and pass the end of the twine through the hole in the center of the lid.

And Primary Schools



Twine Box

Hand Work for Kindergartens

Model VI. — Handkerchief Case

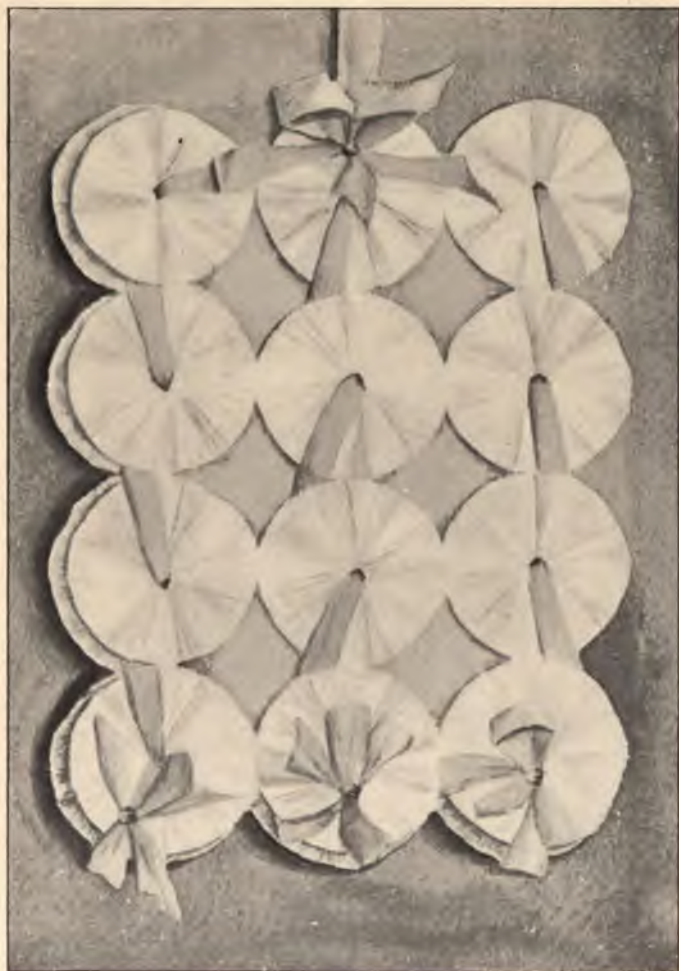
FOUNDATION : — Twenty-four pasteboard disks, $1\frac{3}{4}$ in. in diameter, with a $\frac{1}{2}$ in. circular hole cut in the center of each.

After the disks are wound, fasten them together so that they form two oblongs, each three disks wide and four disks long.

Line each oblong with a silk pad, containing a layer of cotton wadding and a small quantity of sachet powder.

Join the oblongs at one end and ornament with ribbon, as shown in the model.

And Primary Schools



Handkerchief Case

Hand Work for Kindergartens

SERIES III

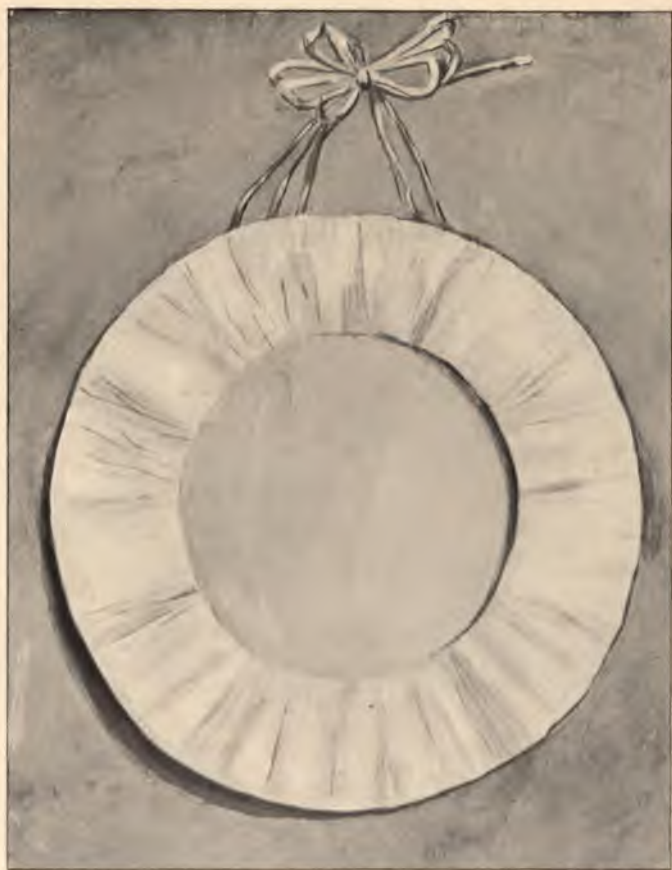
Model I. — Picture Frame

FOUNDATION:—One pasteboard disk, 6 in. in diameter, with a circular hole, $3\frac{1}{2}$ in. wide, cut in the center.

Cover the $1\frac{1}{4}$ in. foundation ring smoothly with raphia. Hang by means of a raphia loop, fastened either to the back or front of the frame and ornament with bows, if desired.

Back the frame with a 4 in. x 4 in. square of pasteboard.

And Primary Schools



Picture Frame

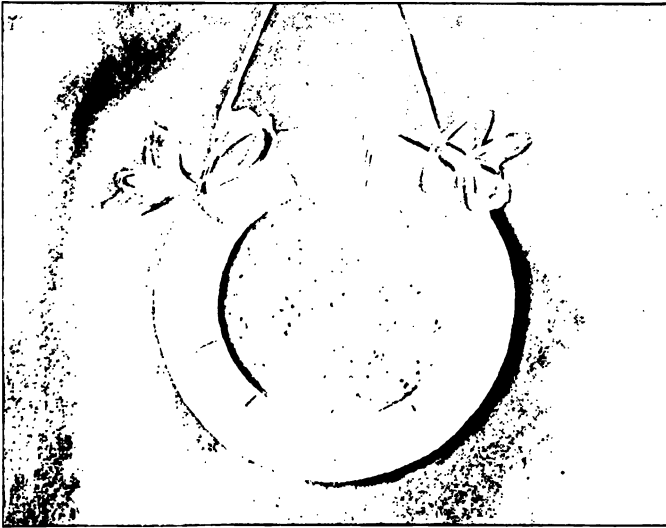
Hand Work for Kindergartens

Model II. — Match Strike

FOUNDATION :—One pasteboard disk, $4\frac{1}{2}$ in. wide, with a 3 in. round hole cut in the center.

Cover the $\frac{3}{4}$ in. ring with raphia and glue a 4 in. circle of sandpaper to the back of the ring, with the sanded surface placed against the raphia. Ornament with bows and hang by a loop.

And Primary Schools



Match Strike

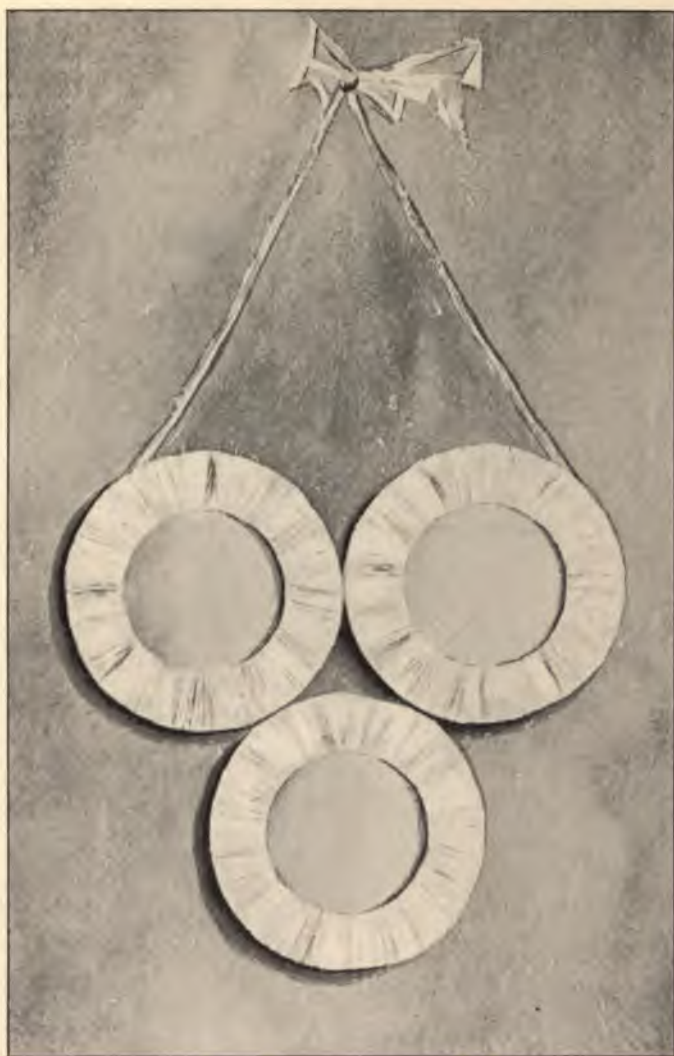
Hand Work for Kindergartens

Model III. — Triple Picture Frame

FOUNDATION :—Three pasteboard disks, $3\frac{1}{2}$ in. in diameter, with a 2 in. circular hole cut in the center of each.

Cover the three $\frac{3}{4}$ in. rings with raphia. Back them with three squares of pasteboard, and fasten them together in the form of a triangle. Hang with a loop and bow.

And Primary Schools



Triple Picture Frame

Hand Work for Kindergartens

Model IV. — Thermometer Back

FOUNDATION :—One pasteboard oval 3 in. x 5 in., with a small oval slit in the center, $2\frac{1}{2}$ in. x $\frac{3}{4}$ in.

Wind the foundation with raphia. Fasten the thermometer as indicated in the picture and hang by means of a raphia bow and loop.

And Primary Schools



Thermometer Back

Hand Work for Kindergartens

Model V. — Picture Holder

FOUNDATION:—Three pasteboard disks, $4\frac{1}{2}$ in. in diameter, with a $3\frac{1}{2}$ in. circular hole cut in the center of each.

Cover the three $\frac{1}{2}$ in. rings with raphia, and fasten together as indicated in the model. Finish with a loop and bow.

And Primary Schools



Picture Holder

Hand Work for Kindergartens

SERIES IV

Model I. — Note Book

FOUNDATION:—Two pasteboard oblongs, $2\frac{1}{2}$ in. x 6 in.

Wind the boards with raphia. Cut several leaves of white note paper, $2\frac{1}{4}$ in. x $5\frac{3}{4}$ in., and place them between the raphia-wound boards. Bind all together on one of the longer edges by sewing over and over, through the paper and the raphia-covered boards. Tie a small pencil to a point in the binding.

And Primary Schools



Note Book

Hand Work for Kindergartens

Model II. — Letter Case

FOUNDATION :—One oblong pasteboard, 4 in. x 5½ in.

One oblong pasteboard, 3½ in. x 5½ in.

After covering the oblongs, place the boards together so that two of the longer edges coincide, and sew over and over through these edges with a sharp pointed needle and a strand of raphia. The joined edges form the bottom of the case. Let the narrow board, which acts as the front of the case, fall forward 2½ in. from the back like an open book. Secure it in this position by running several strands of raphia, varying in length, back and forth between the two boards at the sides. Hang the case by means of a loop and bow.

And Primary Schools



Letter Case

Hand Work for Kindergartens

Model III.— Needle Book

FOUNDATION:—Two oblong pasteboards, each 2 in. x 3 in.

After winding, place between the boards several leaves of flannel, cut a little smaller than the covers, and bind all together with raphia.

And Primary Schools



Needle Book

Hand Work for Kindergartens

Model IV. — Darning Case

FOUNDATION:—Two pasteboard oblongs, each 6 in. x $3\frac{1}{2}$ in.

Wind and fasten the oblongs together by means of four straps made of narrow ribbon. As the case lies open, take two of the straps and fasten one end of each to the right edge of each cover. Take the other two straps and fasten one end of each to the left edge of each cover. This secures two sets of hinges, and the case will open and close equally well at back or front. Under one set of straps place some leaves of flannel, notched around the edges, for holding the needles; under the other set, place several skeins of darning cotton.

And Primary Schools



Darning Case

Hand Work for Kindergartens .

SERIES V

Model I. — Scrap Bag

FOUNDATION:—One pasteboard ring, $2\frac{1}{2}$ in. wide and 3 in. in diameter.

One pasteboard disk, 3 in. in diameter, with a $\frac{1}{2}$ in. round hole cut in the center.

Fasten the covered disk to the bottom edge of the covered ring. Ornament and hang with a ribbon.

And Primary Schools



Scrap Bag

Hand Work for Kindergartens

Model II. — May Basket

FOUNDATION:— One ash-splint ring, $1\frac{1}{4}$ in. wide, and 4 in. in diameter.

One pasteboard disk, 4 in. in diameter, with a $\frac{1}{2}$ in. round hole cut in the center.

One hard wood slat, 10 in. long and $\frac{1}{4}$ in. wide.

Cut the ash splint 13 in. long. Bend it in the form of a ring and lap the ends 1 in. Secure it by winding over and over the lapped ends, and by passing the needle and thread back and forth several times through the double splint. Cover with raphia. Fasten the disk when covered to one edge of the covered ring. Wind the slat with raphia. Bend it in the form of a handle and fasten the ends by sewing them securely to the inside of the ring at opposite points.

And Primary Schools



May Basket

Hand Work for Kindergartens

Model III.— Match Strike

FOUNDATION: — One pasteboard ring, which may be formed from a ribbon bolt, 3 in. wide and $2\frac{1}{2}$ in. in diameter.

Two pasteboard disks, $2\frac{3}{8}$ in. in diameter.

Cover the ring with raphia. Paste a piece of sandpaper, $2\frac{1}{2}$ in. in diameter, on one side of each of the uncovered pasteboard disks. With the sandpaper side out, insert one of the disks into the ring at each end. Place a little heavy glue carefully around both edges of the ring and press down the sandpaper until it adheres firmly. Hang with ribbon or raphia.

And Primary Schools



Match Strike

Hand Work for Kindergartens

Model IV. — Covered Bottle

FOUNDATION : — One pasteboard ring as wide as the bottle is long, exclusive of the neck.

One pasteboard disk, the size of the bottom of the bottle, with a small round hole cut in the center.

One pasteboard disk, the size of the bottle, with a round hole a little larger than the neck of the bottle cut in the center of the disk.

Cover the ring and disks. To one edge of the ring sew the disk containing the small center hole. Place a bottle inside the box formed by the union of the disk and ring, and slip the disk containing the larger center hole over the neck of the bottle and secure it at the upper edge of the ring by sewing. The bottle, with the exception of the neck, will then be entirely inclosed with raphia. Tie a ribbon around the neck and a pretty toilet article is the result.

And Primary Schools



Covered Bottle

Hand Work for Kindergartens

Model V. — Rattle

FOUNDATION: — One pasteboard ring, 3 in. wide, $1\frac{1}{2}$ in. in diameter.

One pasteboard disk, $1\frac{1}{2}$ in. in diameter, with a small round hole cut in the center.

One pasteboard disk, $1\frac{1}{2}$ in. in diameter, with a $\frac{1}{4}$ in. round hole cut in the center.

One section of a dowel stick, 6 in. long and $\frac{1}{4}$ in. thick.

Cover the ring, disks, and stick. Sew the disk containing the small hole to one edge of the ring. Pass one end of the dowel stick through the $\frac{1}{4}$ in. hole in the other disk and secure it firmly in position by tying or gluing. Place several buttons or other small objects in the box formed by the union of the disk and ring. Close the top of the box by sewing to the rim the disk containing the dowel stick. Pass a strand of raphia about the middle of the box and fasten it with a bow.

And Primary Schools



Rattle

Hand Work for Kindergartens

Model VI. — Drinking Glass Case

FOUNDATION FOR CASE:—One pasteboard ring, 3 in. wide, $2\frac{1}{2}$ in. in diameter.

One pasteboard disk, $2\frac{1}{2}$ in. in diameter, with a small round hole cut in the center.

FOUNDATION FOR COVER:—One pasteboard ring, 1 in. wide, $2\frac{3}{4}$ in. in diameter.

One pasteboard disk, $2\frac{3}{4}$ in. in diameter, with a small round hole cut in the center.

After covering the foundations with raphia, sew the $2\frac{1}{2}$ in. disk to one edge of the $2\frac{1}{2}$ in. ring, thus forming the case. Sew the $2\frac{3}{4}$ in. disk to one edge of the $2\frac{3}{4}$ in. ring, thus forming the cover. Wind a small ring, made of flat or round reed, with raphia. Fasten this ring to the center of the cover and the case is complete.

And Primary Schools



Drinking Glass Case

Hand Work for Kindergartens

Model VII. — Hairpin Box

FOUNDATION FOR BOX:—One pasteboard ring, $3\frac{1}{2}$ in. wide, $1\frac{1}{2}$ in. in diameter.

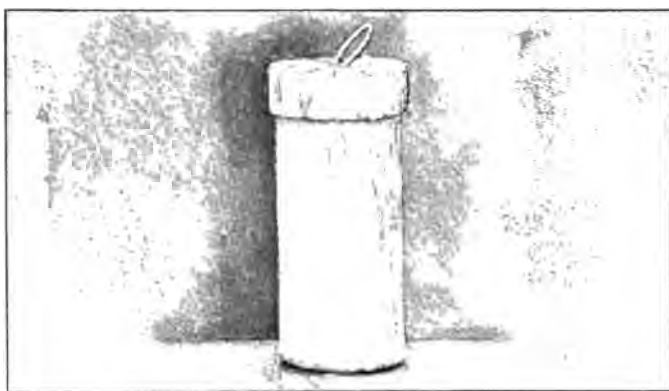
One pasteboard disk, $1\frac{1}{2}$ in. in diameter, with a small round hole cut in the center.

FOUNDATION FOR COVER:—One pasteboard ring, $\frac{1}{2}$ in. wide, $1\frac{3}{4}$ in. in diameter.

One pasteboard disk, $1\frac{3}{4}$ in. in diameter, with a small round hole cut in the center.

Sew the $1\frac{1}{2}$ in. disk to one edge of the wide ring and the $1\frac{3}{4}$ in. disk to one edge of the narrow ring, after all are covered with raphia. Wind a small brass curtain ring, about 1 in. in diameter, with raphia and fasten the ring to the center of the cover.

And Primary Schools



Hairpin Box

Hand Work for Kindergartens

Model VIII. — Cuff Box

FOUNDATION FOR BOX:—One ring, made of two thicknesses of bristol board, $4\frac{1}{2}$ in. wide, 5 in. in diameter.

One pasteboard disk, 5 in. in diameter, with a $\frac{1}{2}$ in. round hole cut in the center.

FOUNDATION FOR COVER:—One ash-splint ring, 1 in. wide, $5\frac{1}{4}$ in. in diameter.

One pasteboard disk, $5\frac{1}{4}$ in. in diameter, with a $\frac{1}{2}$ in. round hole cut in the center.

After covering the rings and disks, sew the 5 in. disk to one edge of the wide ring, and the $5\frac{1}{4}$ in. disk to one edge of the narrow ring. Fasten a small raphia-wound ring to the center of the cover.

And Primary Schools



Cuff Box

Hand Work for Kindergartens

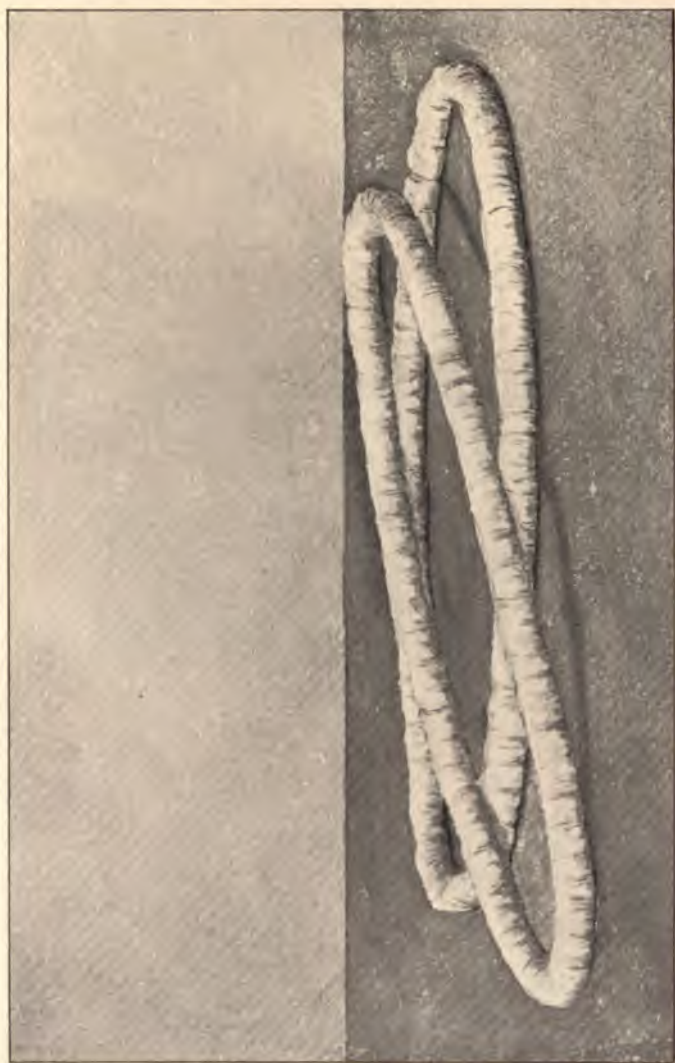
SERIES VI

Model I. — Rings for Ring Toss

FOUNDATION:—One 30 in. length of round reed, No. 8.

Bend the reed in the form of a ring. Lap the ends and fasten them securely together. Take five or six strands of dampened raphia and wind them all together about the ring. Secure the ends by winding over them. Continue to use several strands of raphia at once until the ring is of the desired thickness.

And Primary Schools



Rings for Ring Toss

Hand Work for Kindergartens

Model II.—Napkin Ring

FOUNDATION:—One hard wood slat, $7\frac{1}{2}$ in. long, $\frac{1}{4}$ in. wide.

Soak the slat until it is pliable. Bend it in the form of a ring. Lap the ends $\frac{1}{2}$ in. and wind and sew them securely together. Wind, at one time, several strands of raphia about the ring. When it is of the desired thickness, ornament the ring with a bow.

And Primary Schools



Napkin Ring

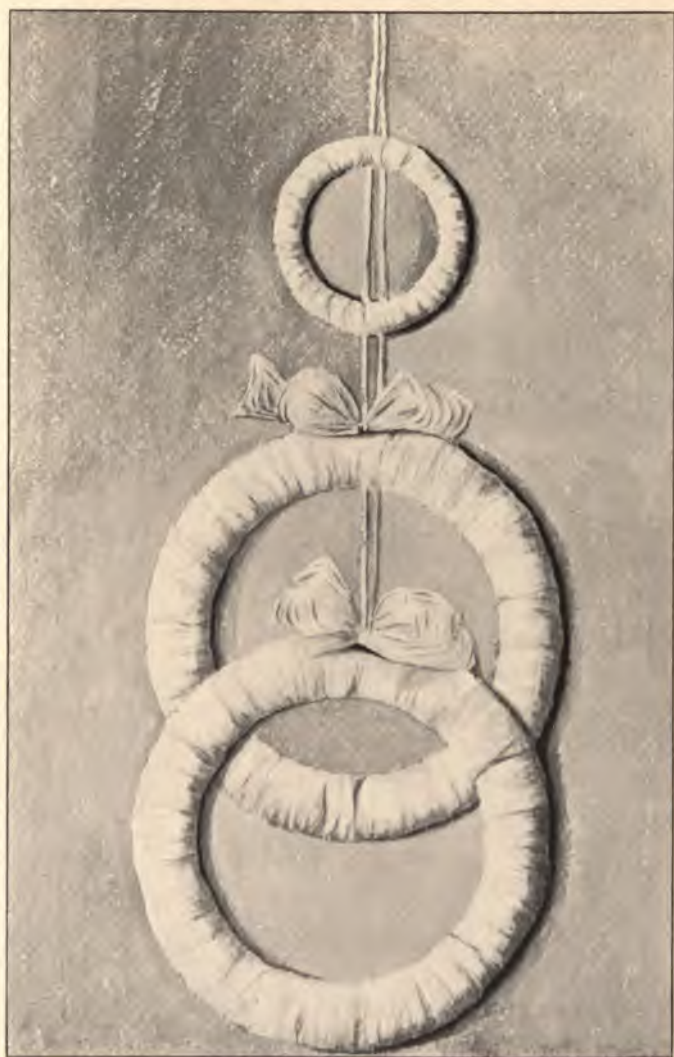
Hand Work for Kindergartens

Model III. — Towel Rings

FOUNDATION :—One 9 in. and two 19 in. lengths of round reed, No. 8.

Soak the reeds and form them into three rings. Cover each ring, using several strands of raphia at a time, until it is of the desired thickness. Fasten the three rings together with raphia, as shown in the model, and ornament with bows.

And Primary Schools



Towel Rings

SERIES VII

Model I. — Whisk Broom

FOUNDATION FOR HANDLE:—One 8 in. length of round reed, No. 8.

Lap the reed and sew securely. Wind the ring thus formed with several strands of raphia at a time until it is about the size of the finger.

Cut many strands of raphia, 14 in. long. Lay them side by side and then tie them all together firmly around the middle. Pass these strands through the ring to the place where the raphia is tied. Then bend the strands down and wind and tie them firmly underneath the ring. This forms the brush.

And Primary Schools



Whisk Broom

Hand Work for Kindergartens

Model II. — Broom

FOUNDATION FOR HANDLE:—One 20 in. length of round reed, No. 2.

Soak the reed. Double it and begin to wind at the open end. Wind to within about an inch of the closed end, which will then present the form of a loop. See Fig. 4.

Cut numerous 5 in. lengths of raphia and insert the base of the handle into the center of this bunch of strands. Wind and tie the bunch securely to the handle about half an inch below the top end of the strands.



Fig. 4

And Primary Schools



Broom

Hand Work for Kindergartens

Model III. — Doll

Cut many strands of raphia, 22 in. long. Place these side by side and wind and tie all together firmly about the middle. Double the strands, letting the place where they are tied together form the crown of the doll's head. Before tying down for the neck, separate from the main portion of the raphia a sufficient quantity for the hair. Cut this 4 in. long and bend it back over the place where the whole number of strands are tied together. One and three fourths inches below the crown tie the raphia again to represent the neck line. Then from the main portion separate strands of raphia on either side to serve as arms. Cut this 3 in. long and wind firmly until each arm presents the desired appearance. Three inches below the neck tie again to form the waist line. Use ink dots, beads, or knots of worsted for features. Ornament the neck, waist, and hair with bows of narrow ribbon and place a raphia-wound hat upon the head.

And Primary Schools



Doll

Hand Work for Kindergartens

SERIES VIII

Miscellaneous Objects

Model I. — Raphia-Trimmed Doll's Hat

The trimming consists of pompons fastened around the crown of the hat and a bow at the back.

The pompons are made in the following manner: Take two circular pasteboard disks, 1 in. in diameter, cut a round hole in the center of each, about $\frac{3}{8}$ in. wide. Put the disks together so that two surfaces coincide, and wind with raphia until the hole in the center is completely closed. See Fig. 5. Then cut the raphia, inserting the point of the shears between the pasteboard disks, as shown in the picture, going completely around the outer edge of the ring. Spread the pasteboard disks slightly apart and pass a strand of raphia between them and completely around the rings. Tie as tightly as possible and tear off the disks. Trim the raphia until it presents, as nearly as possible, the form of a ball. Sew the balls around the crown of the hat and fasten a bow at the back.

And Primary Schools



Fig. 5



Raffia-Trimmed Doll's Hat

Hand Work for Kindergartens

Model II. — Box

FOUNDATION FOR BOX : — Two pasteboard oblongs, 7 in. x $2\frac{1}{2}$ in. One pasteboard oblong, 7 in. x 3 in. Two pasteboard oblongs, 3 in. x $2\frac{1}{2}$ in.

FOUNDATION FOR COVER : — One pasteboard oblong, $7\frac{1}{4}$ in. x $3\frac{1}{4}$ in.

Wind all the oblongs with raphia and fasten all together in the form of a box. Fasten the cover with raphia hinges and ornament it with bows, if desired.

And Primary Schools



Box

Hand Work for Kindergartens

Model III. — Jardiniere or Scrap Basket

FOUNDATION FOR SIDES:— Four wedge shaped pasteboards, 6 in. long, 4 in. wide at the top, and 3 in. wide at the bottom.

FOUNDATION FOR BOTTOM:— One pasteboard square, 3 in. x 3 in.

Cover the pasteboards and fasten them together as shown in the model. Ornament with ribbon or raphia bows, if desired.

And Primary Schools



Jardiniere or Scrap Basket

Hand Work for Kindergartens

Model IV.— Watch Case

FOUNDATION:— Two pasteboards, 8 in. long, cut in the form of a shoe sole, with a long narrow slit running through the center of each from toe to heel.

Cut one of the soles in two on its shorter diameter and discard the portion representing the heel.

Wind the pasteboards with raphia. Use a needle and pass the raphia over and over the boards, going through the center slit each time, until all is evenly covered. Fasten the two parts together as shown in the model.

And Primary Schools



Watch Case

Hand Work for Kindergartens

Models V. and VI.—Picture Mounts

FOUNDATION FOR ROUND FRAME:—One disk made of mounting board of the desired color, 5 in. in diameter, with a 4 in. round hole cut in the center.

FOUNDATION FOR OBLONG MOUNT:—One cardboard oblong, 7 in. x 5 in.

Punch holes in the edges of the foundations at

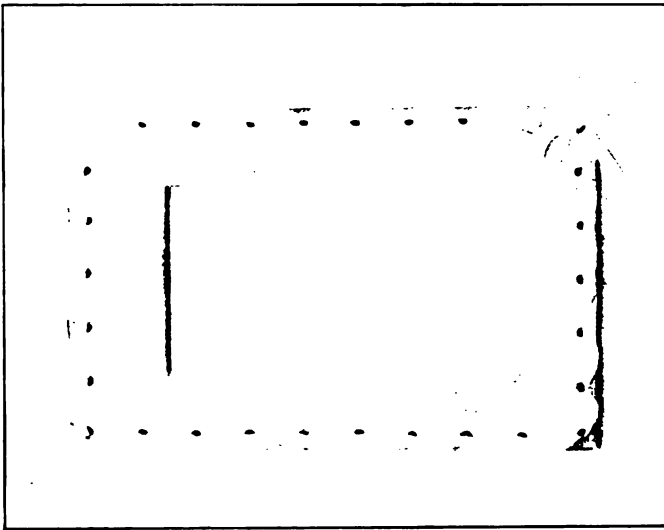


Picture Mount

And Primary Schools

short intervals. Thread a needle with raphia and sew over and over about the edges of the ring and the oblong board. After going completely around the edges of the frames, turn them and sew over and over in the opposite direction all the way around again. Ornament each one with bows and hang each with a raphia loop.

Birch bark may be combined with raphia in a similar manner with very artistic results.



Picture Mount

Part IV. --Drawing

FOR the cultivation of the creative faculty, purely imaginative drawing has an important place in the kindergarten. Yet this drawing needs to be supplemented by a plan in which caprice is not the only directing factor. Such a plan has been developed in the exercises which here follow.

Besides their value in developing the imagination, these exercises will be found useful as a preparation for writing, and as a means of cultivating ideas of direction. They are also valuable because of the great freedom of movement required in their execution, with its consequent development of the child's large muscles and their controlling nerve centers. To secure the greatest freedom of arm movement, chalk and an ordinary school blackboard should be used. Very satisfactory results may be obtained, however, by using the Dove marking crayon or the New Era oil crayon and large sheets of manila drawing paper. These crayons are so large that the child is obliged to hold them loosely and a cramped position of the

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hand is almost impossible. They may be purchased in black, red, yellow, and blue. Ordinary writing ink and good sized Japanese school brushes may be substituted for the crayons, if desired.

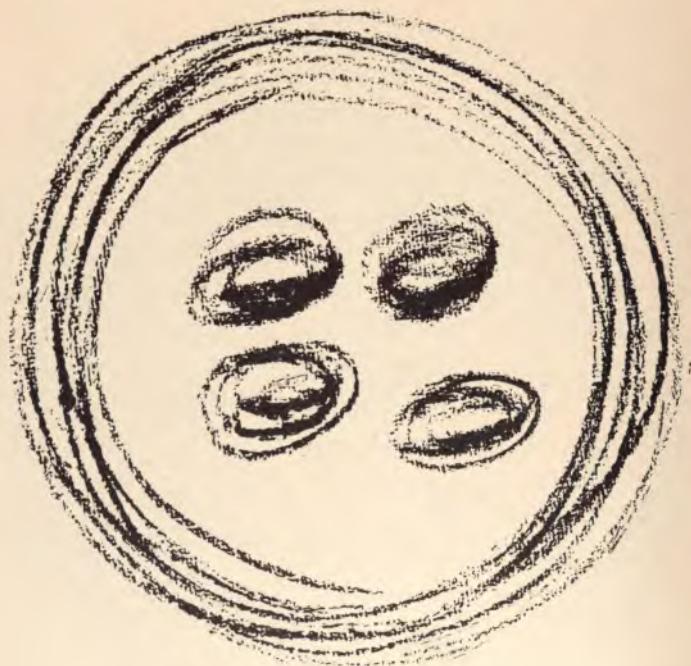
Series I. — Curved Line Drawings



Hoop

Hand Work for Kindergartens

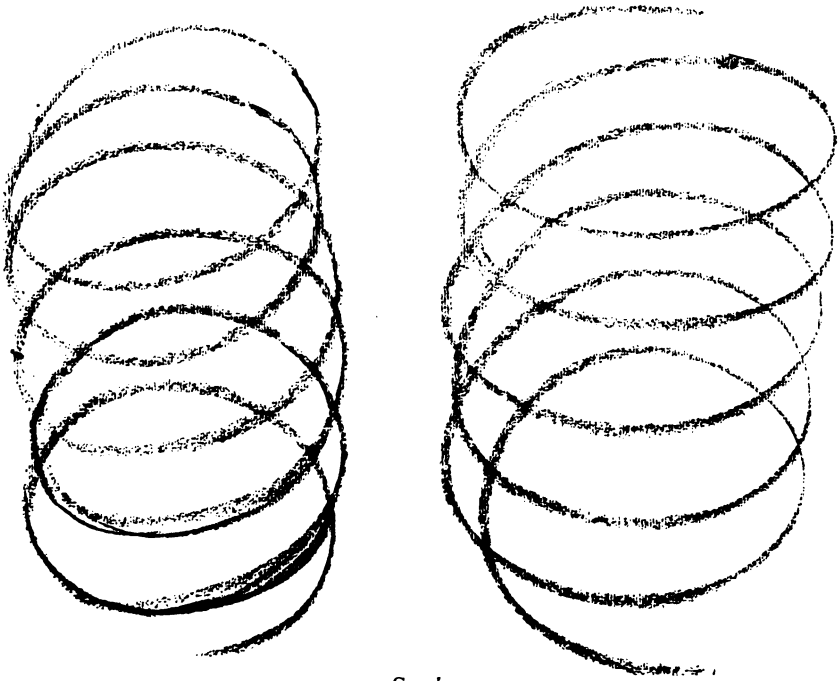
Series I.—Curved Line Drawings



Bird's Nest with Eggs

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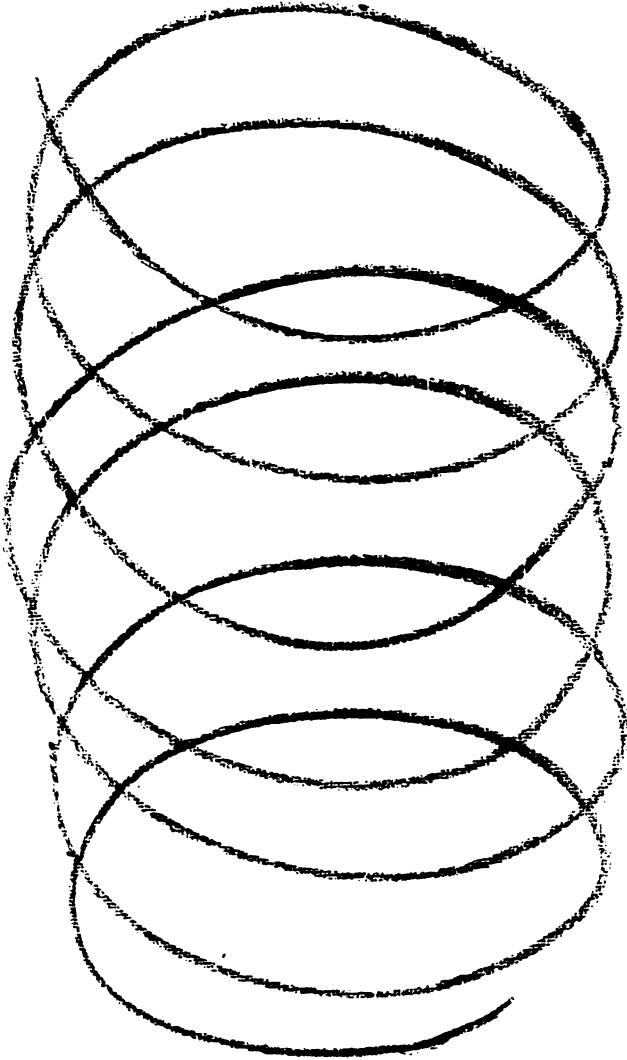
Series I. — Curved Line Drawings



Smoke

Hand Work for Kindergartens

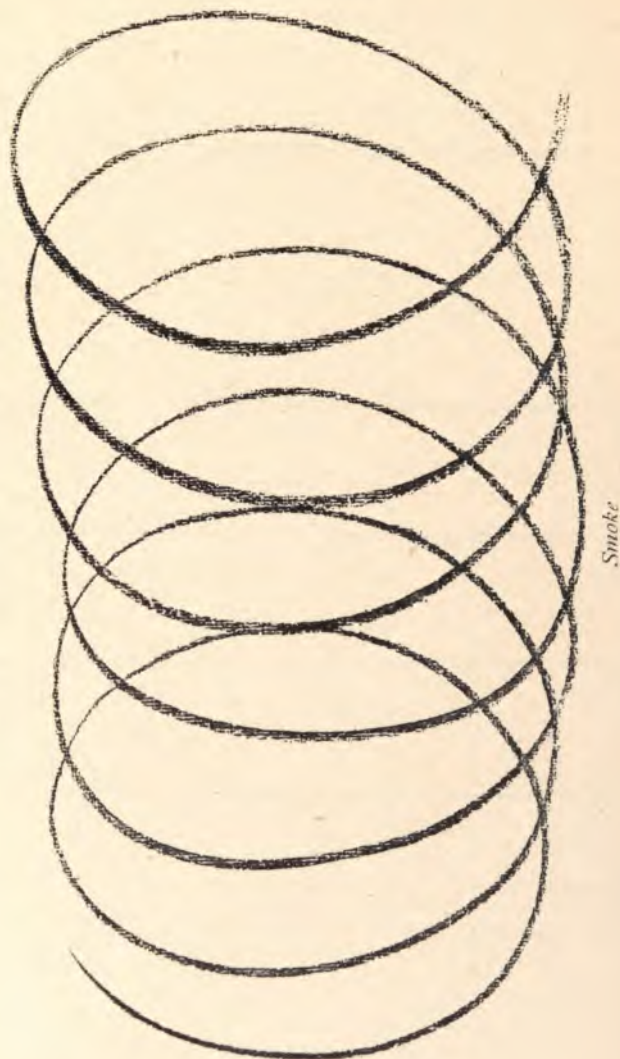
Series I.—Curved Line Drawings



Smoke from Chimney or Engine

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Series I. — Curved Line Drawings



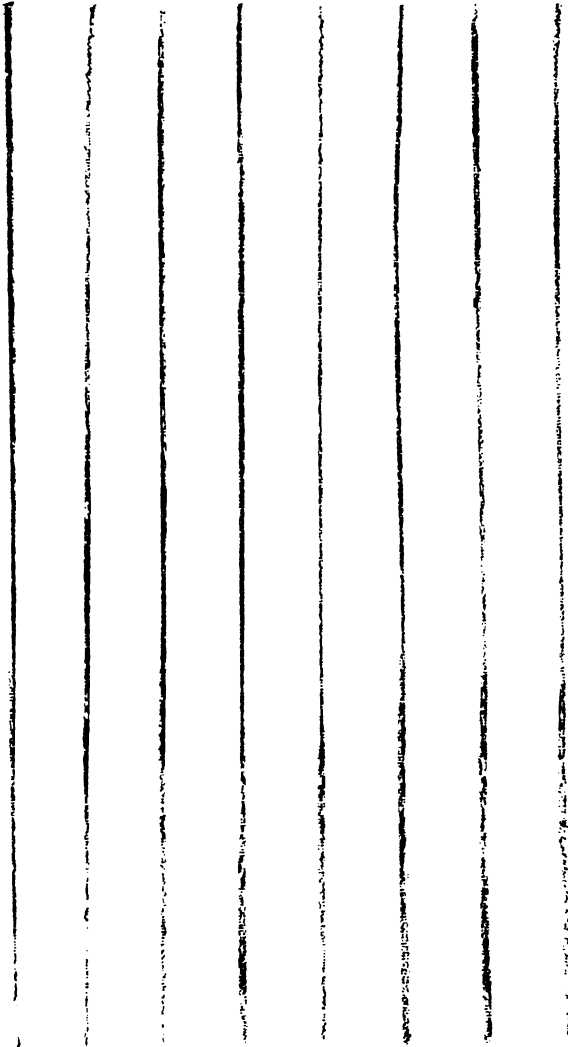
Hand Work for Kindergartens

Series II.—Straight Line Drawings. Vertical Lines

Poles or Posts

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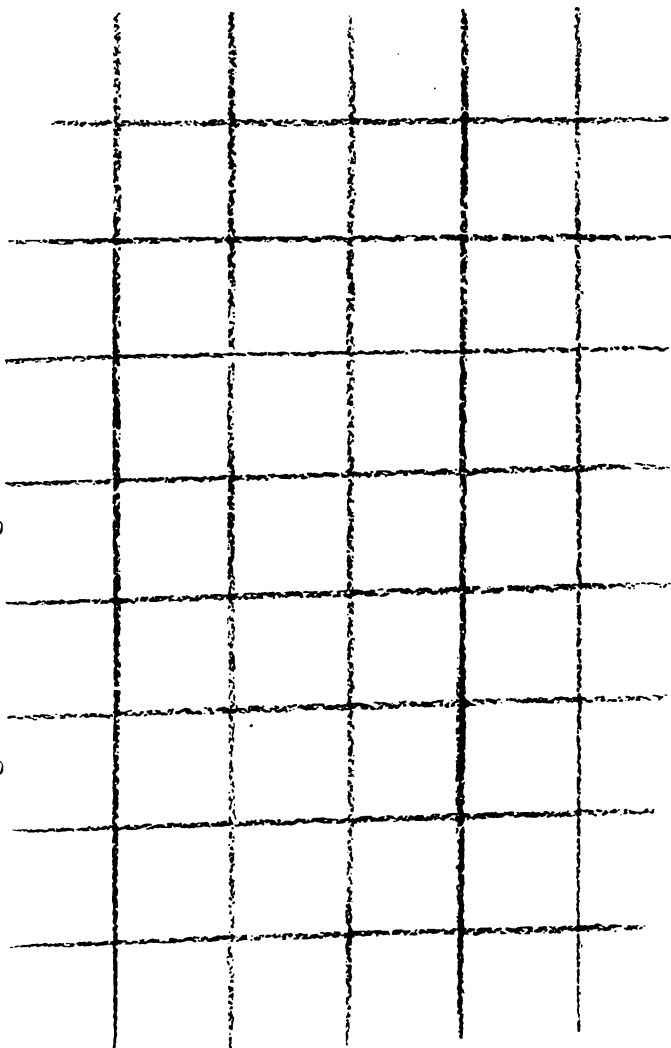
Series II.—Straight Line Drawings. Horizontal Lines



Roads or Paths

Hand Work for Kindergartens

Series II. — Straight Line Drawings. Vertical and Horizontal Lines

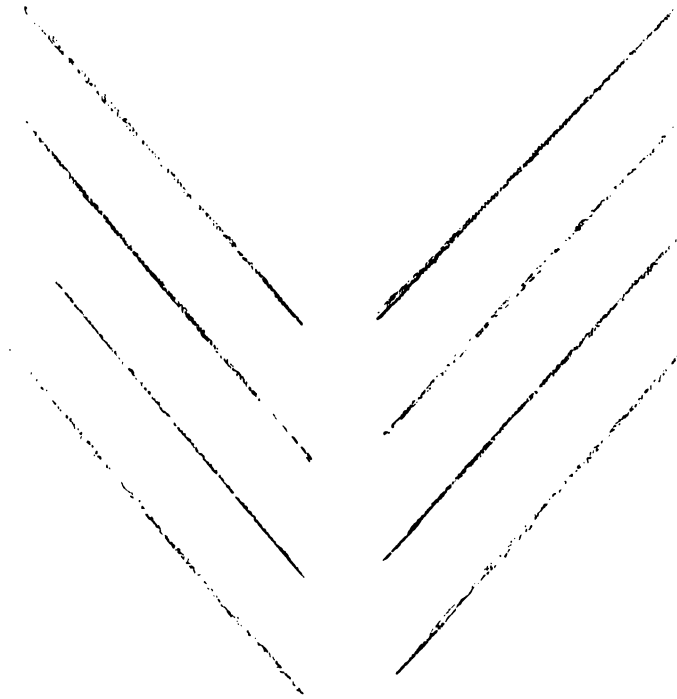


Lattice Work or Fences

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Series II.—Straight Line Drawings

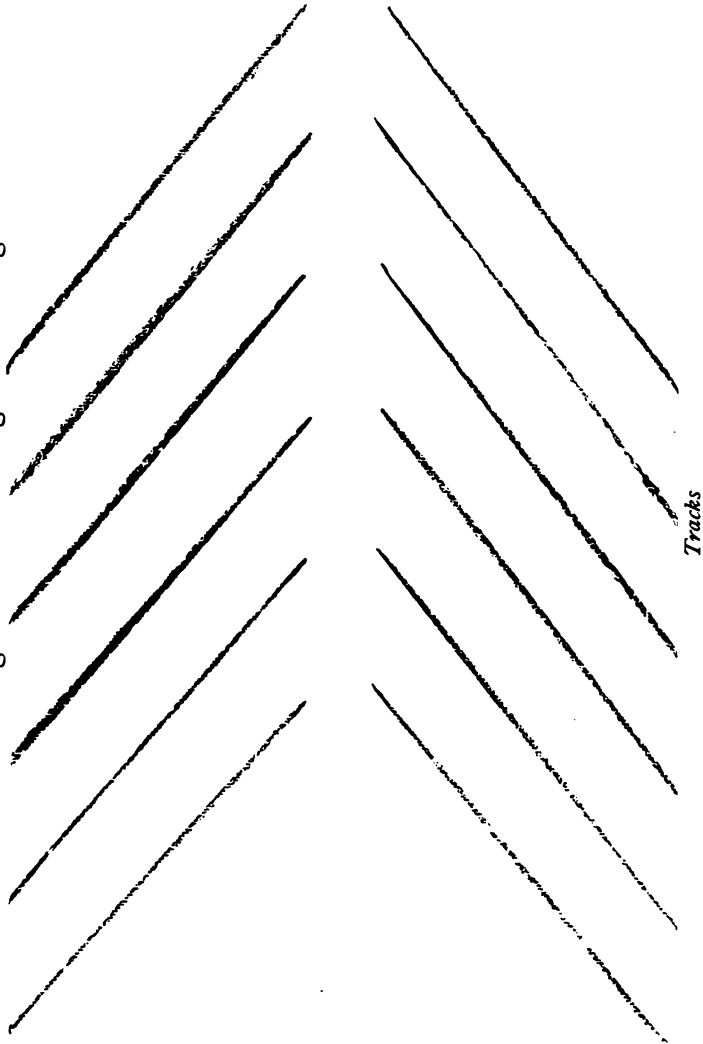
Slanting Lines



Tracks

Hand Work for Kindergartens

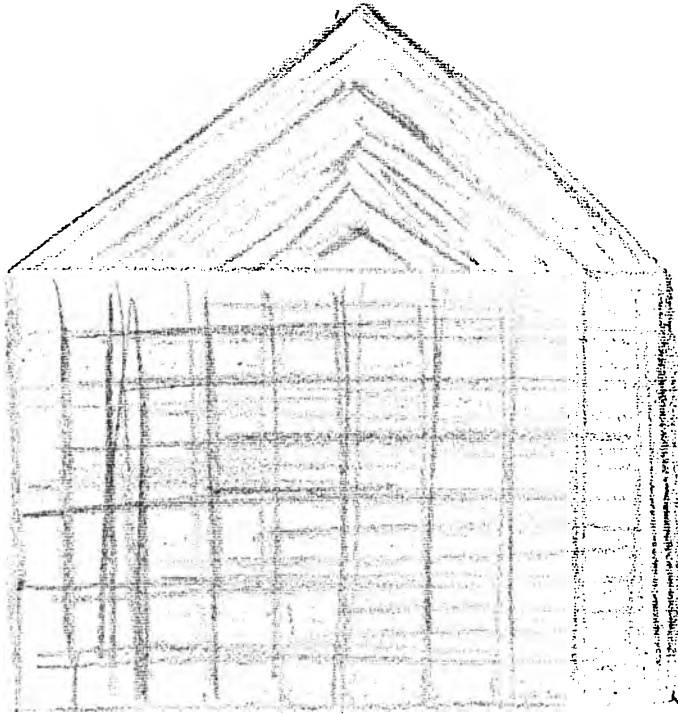
Series II. — Straight Line Drawings. Slanting Lines



Tracks

And Primary Schools

Series II.—Straight Line Drawings
Vertical, Horizontal, and Slanting Lines

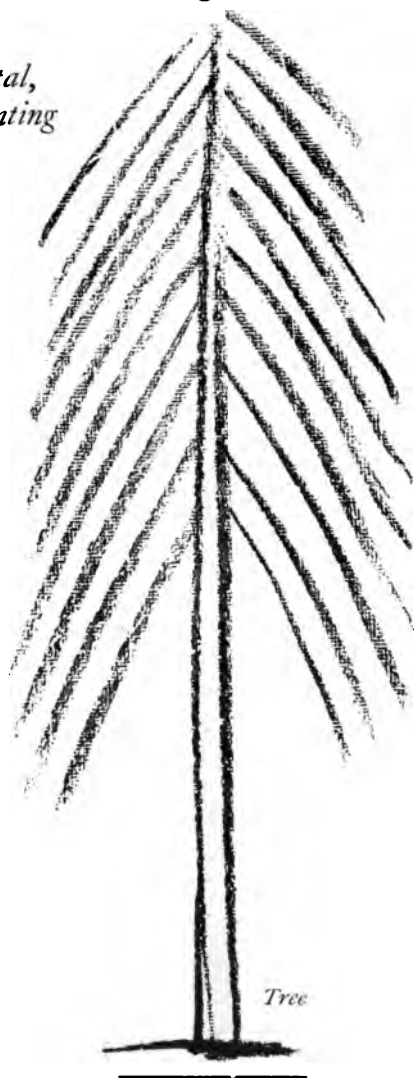


House

Hand Work for Kindergartens

Series II. — Straight Line Drawings

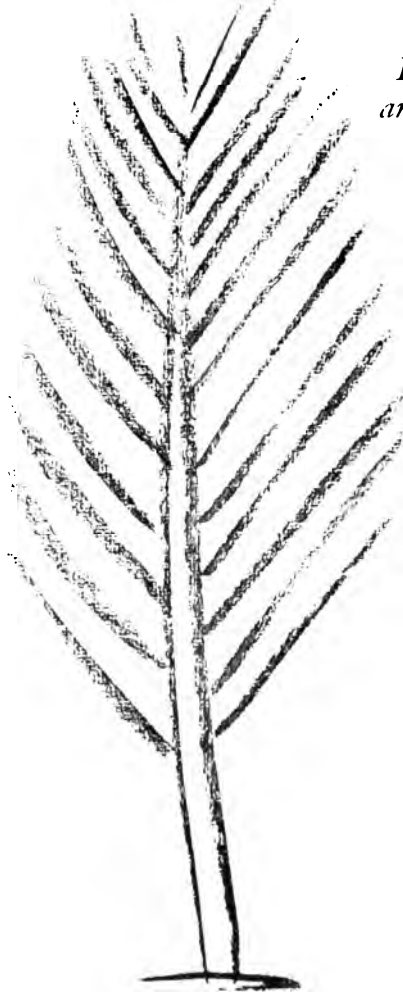
*Vertical,
Horizontal,
and Slanting
Lines*



And Primary Schools

Series II.—Straight Line Drawings

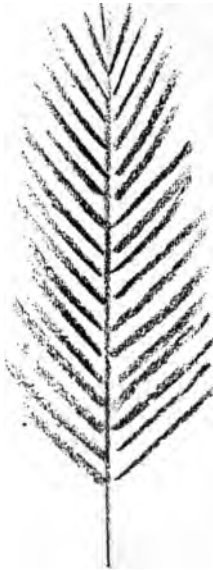
*Vertical,
Horizontal,
and Slanting
Lines*



Tree

Hand Work for Kindergartens

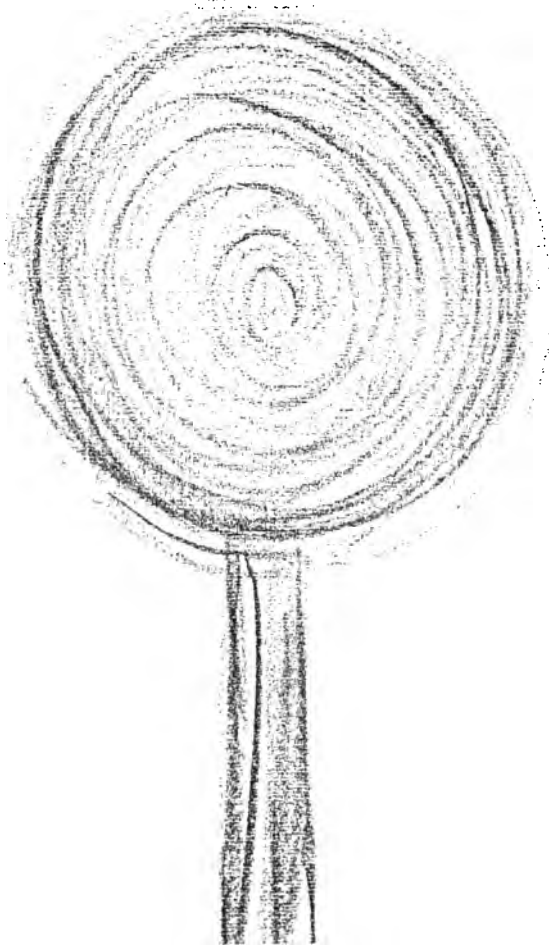
Series II. — Straight Line Drawings *Vertical and Slanting Lines*



Feather and Arrow

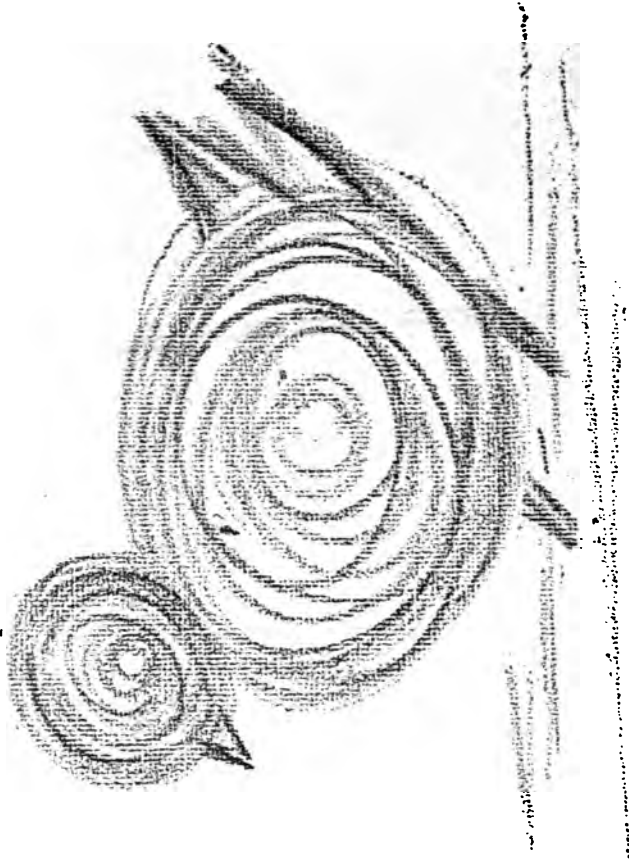
And Primary Schools

Series III.—Curved and Straight Line Drawings



Tree

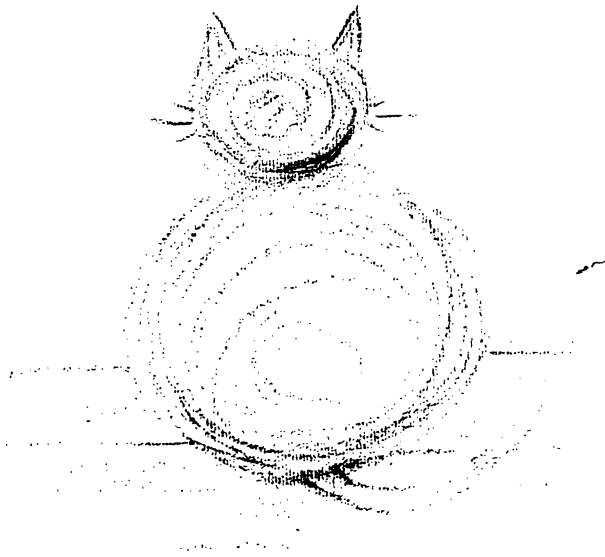
Series III. — Curved and Straight Line Drawings



Chicken

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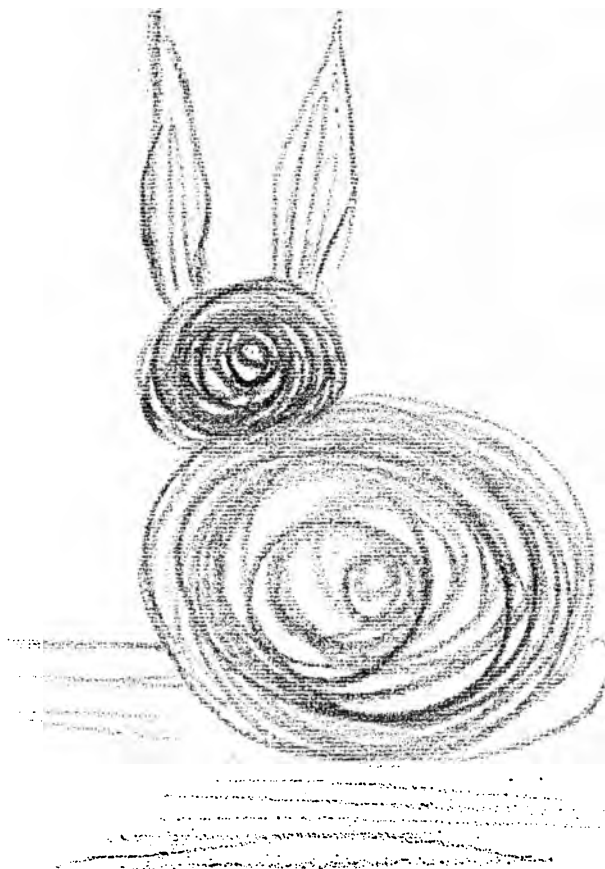
Series III.—Curved and Straight Line Drawings



Cat

Hand Work for Kindergartens

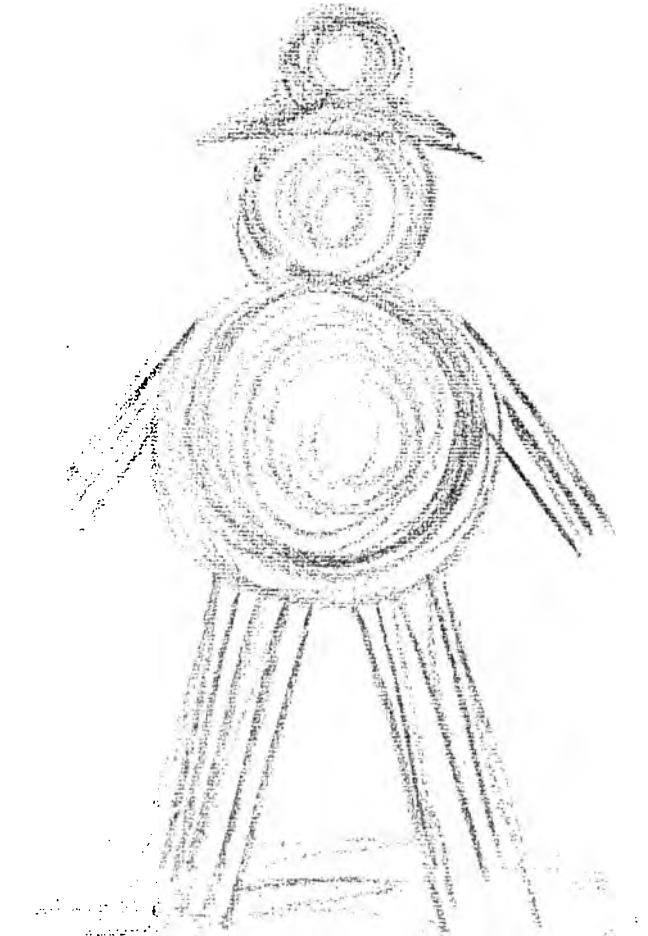
Series III.—Curved and Straight Line Drawings



Rabbit

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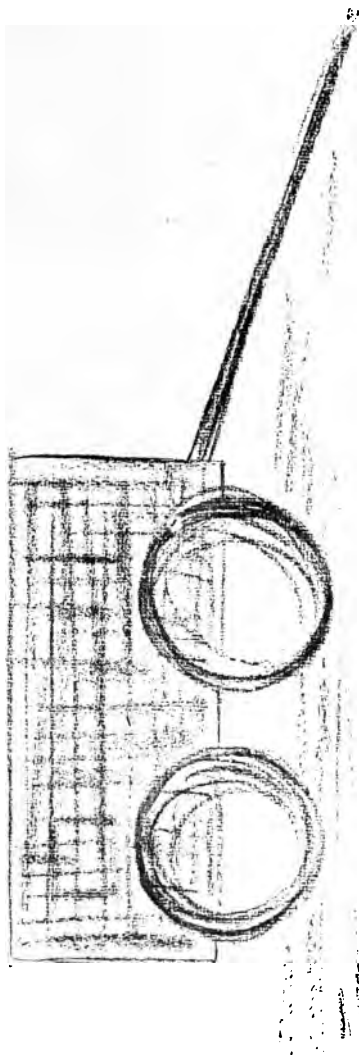
Series III.—Curved and Straight Line Drawings



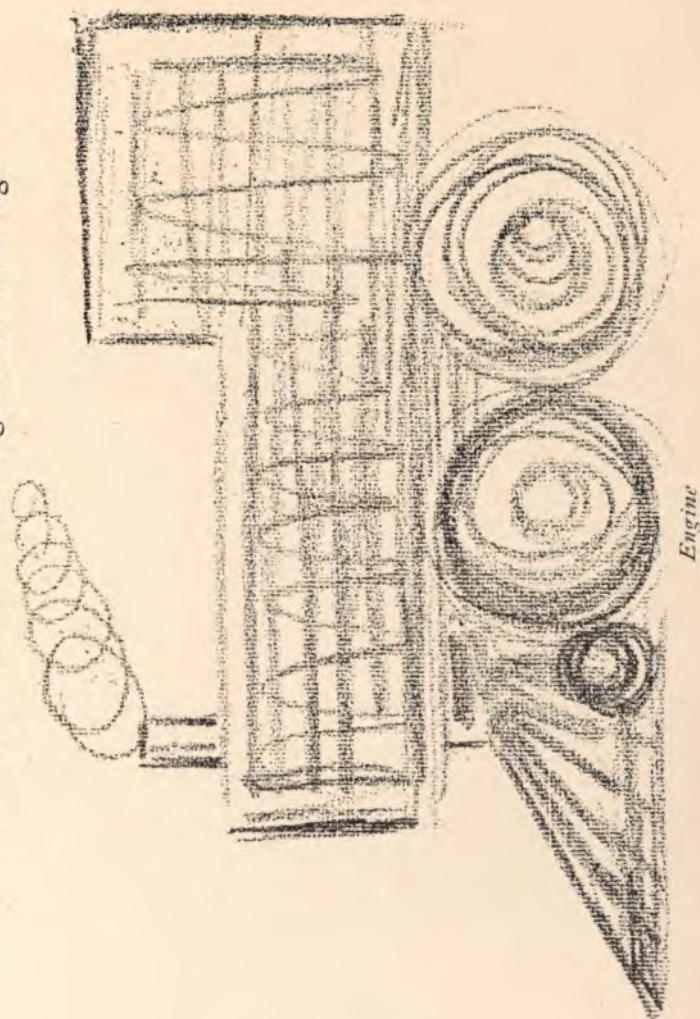
Snow Man

Hand Work for Kindergartens

Series III.—Curved and Straight Line Drawings



Series III. — Curved and Straight Line Drawings



Engine

Hand Work for Kindergartens

Part V. Blue Prints

THE value of the blue print in the kindergarten, aside from giving the child pure delight in the doing of the thing, is to foster the beginnings of artistic taste.

The making of blue prints is really a very simple process. All the work can be done by the child, and the results are much more really beautiful than those usually obtained with kindergarten materials. The child is obliged to calculate and to plan in order to secure the best effects in arrangement of design, and he gets no small degree of muscular exercise in placing, fastening, holding, exposing, washing, and drying of the prints. He is so completely happy while doing this work, that one is tempted to give it more than its rightful share in the kindergarten curriculum.

The regulation printing frames used by photographers are rather expensive; they are also not easily managed by the child. But the kinder-

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Hand Work for Kindergartens

gartner can readily furnish herself with the necessary paraphernalia at slight trouble and expense. Have a number of pieces of glass, about eight inches square, cut by a glazier,—common window glass will do; prepare an equal number of thick, heavy pasteboards, the size of the squares; buy three or four dozen clothespin clips, a package of blue print paper, and you are ready for work.

The paper can be obtained at any photographers' supply store, cut into small sheets ready for use and carefully put up in boxes or envelopes; or it can be secured in large sheets and cut by the kindergartner herself. In the latter case, care must be exercised that it be cut only in a subdued light. It is best preserved if wrapped in black paper, put into a covered box, and stored in a dark closet.

Begin by letting each child select the flowers, ferns, or grasses which he wishes for his picture. Have these laid ready at hand beside him. Place a pasteboard in front of each child and give every one a piece of blue print paper, which is to be put in the center of the board. The grasses and flowers are then placed upon the paper, according to each child's idea of artistic arrangement. Give a square of glass to each one to lay over pasteboard, paper, and flowers. Then have

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